Axis Pistols, Rifles and Grenades

WW2 FACT FILES

PETER CHAMBERLAIN and TERRY GANDER

The pistols and rifles used by the Axis powers retain, to this day, an aura of respect, interest and admiration. This Fact File sets out to describe fully the many types of pistols and bolt action rifles used by Germany, Italy and Japan and the nations under their control. Included are such weapons as the legendary German P.08 and P.38, the Japanese Ariska rifles and the many Italian rifle types Czech, Austrian and Hungarian rifles are included.

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PETER CHAMBERLAIN
AND TERRY GANDER

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Introduction

For the purpose of this Fact File the country in which a design originated has been taken as its main 'heading'. This has lead to a few anomalies such as the inclusion of the Belgian Mauser 1889 in this Fact File devoted to the bolt action rifles and grenades of Germany, Italy, Japan and their allies, but the inevitable 'cross-fertilisation' of designs across Europe and elsewhere has made such anomalies unavoidable.

Since 1945, it has become a popular myth that Germany and the other Axis nations had made long and careful preparations for war, and that in 1939 the Axis armies were equipped and ready for a major conflict. At all levels, and especially in the small-arms sector, this was quite simply not so. In 1939, Germany especially was very short of rifles to arm the expanding armies being created and was far from able to turn out sufficient numbers in time to remedy this situation. As a result, orders were placed with many arms' manufacturers under German control and, after 1940 especially, any usable rifle or pistol that was captured was re-issued to Wehrmacht, Luftwaffe, Kriegsmarine or military police units. Thus many of the weapons mentioned in the companion Fact File on Allied pistols, bolt action rifles and grenades, will be found to have been used by the Germans in some form or other. For the Germans, use of many weapons captured was not difficult as many used the Mauser bolt action which had been the German 'standard' system since 1888, and indeed the Mauser system has been the most widely used bolt action employed on service rifles. Also in German service use was the Austrian Mannlicher action, still in widespread use after 1939.

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The Mannlicher action was also the basis of many Italian service rifles and carbines, albeit modified into the Mannlicher-Carcano system. But the Italian logistical system was chaotic, not only because of the number of types in use, but also because some identical models were in use in two differing calibres. The standard Italian calibre had long been 6.5 mm but, during the 1930s, it was decided to adopt a new 7.35 mm cartridge. Soon after this decision had been taken, war loomed on the political horizon and, having regard to the large stocks of 6.5 mm ammunition on hand, it was decided to revert to the old calibre. The result was a quartermaster's nightmare – for many weapons had been made and issued in 7.35 mm, and the confusion must have been great indeed. It was not fully sorted out before the Italian surrender of 1943, and the Germans took over much of the Italian arsenal. They tried to impose some sort of order by boring out many Italian weapons to their own 7.92 mm calibre but the numbers involved were not large, and the result for many weapon collectors is that identical Italian rifles can be found in any one of three calibres.

The Mauser bolt-action system was also used in Japan, again slightly modified as the Arisaka system. The Japanese rifles were mainly kept very much to a few standard models but again there were ammunition changes. But for the Japanese the problem was mainly one of supply as Japanese industry was unable to supply sufficient numbers of weapons. Mass production methods were applied where possible but these methods often involved very poor standards of finish and safety and, by 1945, many Japanese rifles were as dangerous to the firer as to the target.

It will be noted that many of the weapons covered in this Fact File are pistols. Before 1939 many tacticians thought the pistol was no longer a viable military weapon but events were to prove them wrong. Exactly why this should have been is difficult to discover for the pistol has definite limitations on the battlefield. It is expensive in cost-effective terms, inaccurate, difficult to use effectively and as dangerous to friend as to enemy. But the soldiers asked for, and got, enormous numbers of pistols, in all shapes and forms. Again, German industry could never supply the huge numbers demanded and captured pistols found their way into German service use.

Grenades are included in this Fact File but it must be stressed that only a few examples to illustrate the types used are included and the coverage is by no means comprehensive.

One thing that will soon impress the reader of this Fact File is the age of many of the weapons still in use between 1939 and 1945. Some of the pistols used by many armies were positively ancient, dating back to the 1870s in some cases, and their inclusion is as much a tribute to the manufacturing skills of their makers, as to the demands of war. It has not proved possible to include some of the real antiques that were used and captured in the odd corners of World War 2, but a short search of the files kept on weapons captured in North Africa up to about 1942 will show some very old and odd weapons indeed. Examples are the French Lebel 1866/74 rifle, a Turkish

10.35 mm rifle, the Danish 10.35 mm revolver of 1865, the German Mau revolver of 1878 – and so the list of oddities goes on. These weapons were captured in the field from Italian and German units, but it has not proved possible cram them all into the confines of these pages. Their mention here only demonstra how the needs of modern warfare imposed on the Axis nations the use of mu outmoded and out-dated equipment and that, behind the superbly-equipped fr line units of the German, Italian and Japanese armies, was a host of units equipp with anything that could be fired.

Special Note

The weapons mentioned in this Fact File were often made by a variety of manuf turers and their sub-contractors. Very often entire production lines were set up o which the original manufacturer had little control or influence. As a result, dimensions and weights of what were supposed to be identical weapons often var from example to example, and this should be borne in mind when using the d tables quoted in this Fact File. Wherever possible, reputable sources have be quoted but it has been noted that while compiling the data tables considera differences have been detected between what have until now been accepted dim sions, and the same dimensions quoted in manufacturers' tables or service manu These differences can only be attributed to manufacturing tolerances and the like

Rast-Gasser Revolver

AUSTRIA

Rast und Gasser Revolver M.1898

The Rast und Gasser M.1898 revolver was intended for issue to NCOs and officers of the Austrian and Austro-Hungarian army, although most appear to have found their way into military use by direct purchase. The M.1898 was a very well-made weapon that had several unusual features for a revolver. One was the method of stripping which was effected by pulling down on the trigger guard. Another was the very positive safety. The method of loading was via a gate as the M.1898 used a solid frame, and the trigger mechanism could be used in either a single or double-action mode. By 1939 the M.1898 revolver was still in widespread use in Central Europe and the Balkans, and numbers were in use with the Italian Army. The main reason for this retention was undoubtedly the high standard of manufacture used on the M.1898.

DATA

CALIBRE 8 mm 0.315 in
LENGTH 228 mm 9 in
LENGTH OF BARREL 114 mm 4.5 in
WEIGHT 0.935 kg 2.06 lb
M.V. (AP) 228 m/s 750 ft/sec
CYLINDER CAPACITY 8 rounds

8 mm Repetierpistole M.07

Often known as the 'Roth-Steyr', the M.07 was the first automatic pistol to be taken into official military service when it was adopted by the cavalry arm of the old Austro-Hungarian army in 1908. Later it was also used by the Austro-Hungarian air arm, and after 1918 many remained in use in the Balkans. By 1939 the type was still in use with the Hungarian army and also with the Italians, and some numbers were captured in North Africa. The M.07 was produced in Austria and Hungary prior to 1918, and was one of the pistols that used its own type of ammunition, not used in any other weapon. The design overall was complex and difficult to manufacture, but it was robust enough to survive until World War 2.

TA
BRE 8 mm 0.315 in
TH 233 mm 9.17 in
TH OF BARREL 131 mm 5.16 in
NDER CAPACITY 1.02 kg 2.25 lb
332 m/s 1090 ft/sec
AZINE CAPACITY 10 rounds

/Steyr 8 mm Pistol

9 mm Repetierpistole M.12

The 9 mm Repetierpistole M.12 (or 'Steyr-Hahn') was produced between 1912 a 1919 by Osterreichische Waffenfabrik Steyr. In its original form, it fired a spec 9 mm cartridge designed by Steyr that was not adapted for any other weapon – wh did little to make this Steyr product acceptable to potential customers. The M.12 w adopted as the standard Austrian side-arm during World War 1 and over 250,0 were produced. Between the wars the M.12 was bought by Rumania, Chile and so small Balkan military formations and police forces, but the design never got recognition it deserved. As a pistol design, the M.12 must have been one of strongest ever made, and it employed a locked-breech mechanism operated by barrel rotating through 60°. The magazine could not be removed but had to be fil with a charger clip. In March 1938, Austria became part of the German Reich a the M.12 then became part of the German inventory. Large numbers were chambered to take the 9 mm Parabellum cartridge and the M.12 then became 9 mm P 12(ö).

DATA
CALIBRE 9 mm 0.354 in
LENGTH 216 mm 8.5 in
LENGTH OF BARREL 128 mm 5.1 in
WEIGHT 1.02 kg 2.25 lb
M.V. 340 m/sec 1112 ft/sec
MAGAZINE CAPACITY 8 rounds

9 mm Repetierpistole M.12

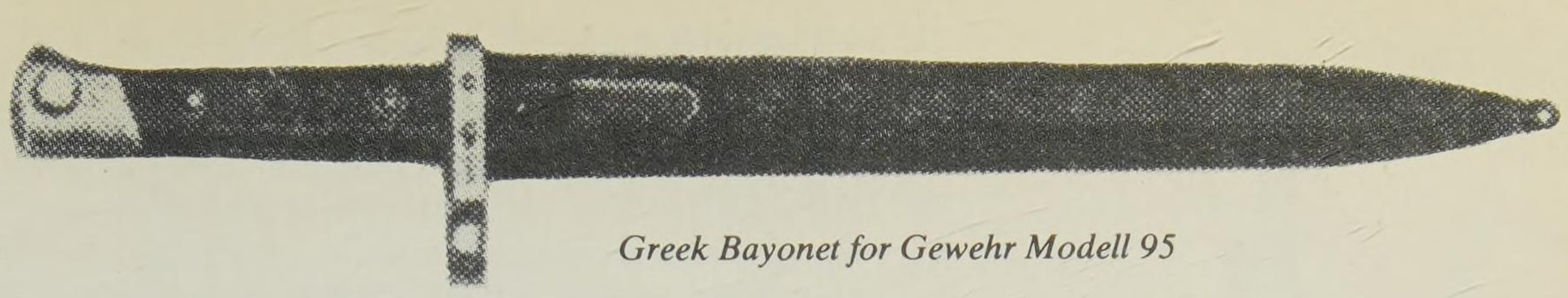
8 mm Repetier-Gewehr Modell 1895

The old Austro-Hungarian Empire adopted the straight-pull bolt action designe Mannlicher in 1884 and kept it in service in one form or another until 1919. The action designed by Ferdinand von Mannlicher was simple, robust and was unusu that it operated on a straight pull to the rear – a later revision involved a turn- mechanism which is dealt with elsewhere. This straight-pull bolt was used on Modell 1884, 1885, 1886, 1888 (all black powder cartridge models), 1888/90 first model to fire a smokeless cartridge), 1886/90, 1890 and the Modell 1895. Modell 1895 became the standard rifle of the old Austro-Hungarian Army dur the Great War and the type was produced in thousands by Steyr in Austria, an Hungary. After 1919, large numbers of Austro-Hungarian rifles were handed o to Italy as war reparations and were still used after 1941. Bulgaria had adopted type back in 1897 and these were still in use in 1939, but the Bulgarians re-chambered theirs to take the 7.92 mm round and re-designated their model M.95/24.

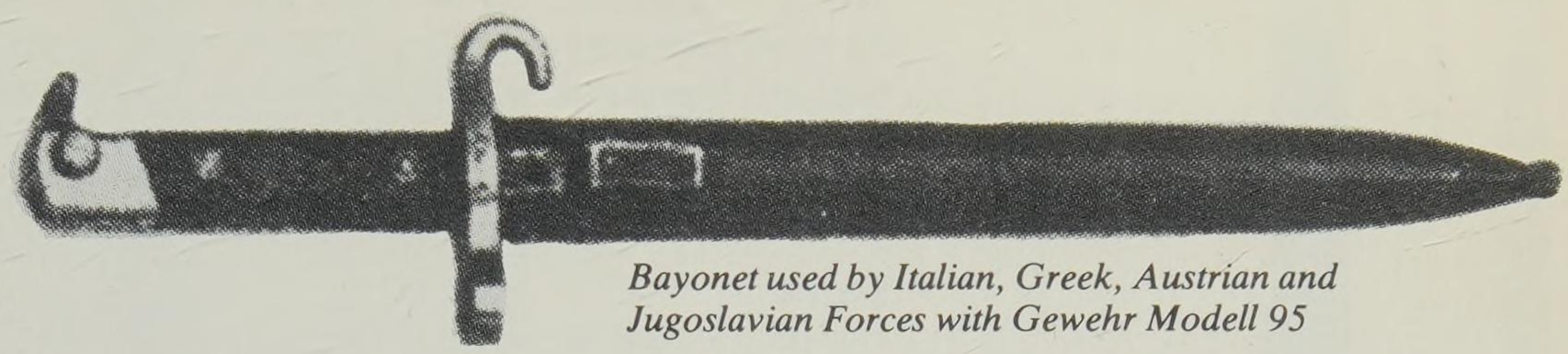
Hungary was still using a small number of old M.1895 rifles in 1939 as Huzagol 95M, but these were gradually phased out in favour of the later 3 Jugoslavia was another user of the M.1895, not only in the original 8 mm calibre also rechambered in Jugoslavia for the 7.92 mm cartridge and known as the M 95 The original Austrian rifles passed under German control in 1938 and then beca the 8 mm Gew 95(ö). A check of user nations, eventual German designations calibres follows:

Austria: 8 mm Repetier-Gewehr Modell 1895. *8 mm Gew 95(ö) or (oe)*
Bulgaria: 7.92 mm M.95/24
Greece: 8 mm M.95/24 *8 mm Gew 306(g)*
Hungary: Huzagol 95M
Italy: Fucile 'Mannlicher' 95 *8 mm Gew 306(i)*
Jugoslavia: Puska 8 mm M 95 M *8 mm Gew 306(j)*
Puska 7.9 mm M 95 M *7.9 mm Gew 294(j)*
Puska 7.9 mm M 95/24 *7.9 mm Gew 294(j)*

DATA
CALIBRE 8 or 7.92 mm 0.315 or 0.312
LENGTH 1270 mm 50 in
LENGTH OF BARREL 765 mm 30.12 in
WEIGHT 3.78 kg 8.31 lb
M.V. 619 m/s 2030 ft/sec
MAGAZINE CAPACITY 5 rounds



Greek Bayonet for Gewehr Modell 95



Bayonet used by Italian, Greek, Austrian and Jugoslavian Forces with Gewehr Modell 95

8 mm Repetier-Stutzen-Gewehr Modell 1895

The Stutzen-Gewehr Modell 1895 was a shortened version of the Gewehr Modell 1895 intended for use by such troops as signallers, engineers and drivers. After 1919 numbers of these weapons were handed over to Italy, and the type was also used in Greece and Jugoslavia. The Stutzen remained in use in Austria and Hungary but, by the end of the 1920s, the Austrians began to convert their weapons to take the longer and more powerful 8 × 56 mm Modell 30 cartridge. The Hungarians followed suit in 1931 and their weapons then were known as the Huzagol 31M. After 1938, the Stutzen came under German control as the 8 mm Stutzen 95(ö) or (oe). The type does not appear to have been issued to military formations but was widely used by civilian police forces. A check list of users and subsequent German designations follows:

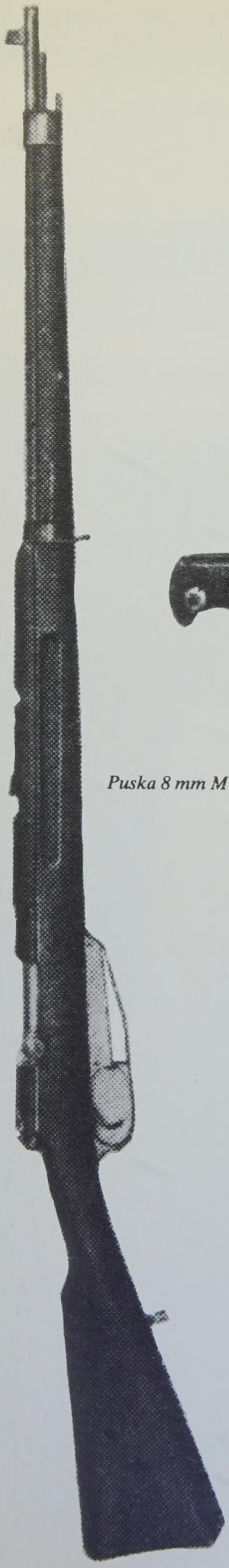
Austria: 8 mm Repetier-Stutzen-Gewehr Modell 1895 *8 mm Stutzen 95(ö)*
Greece: 'Mannlicher' 95 *8 mm Kar 505(g)*
'Mannlicher' 95/24 *7.92 mm Kar 494(g)*
Hungary: Huzagol 31M
Italy: Moschetto 'Mannlicher' 95 *8 mm Kar 505(i)*
Jugoslavia: Karabini 8 mm M 95 M *8 mm Kar 505(j)*

DATA

CALIBRE 8 or 7.92 mm 0.315 or 0.312 in
LENGTH 1005 mm 39.57 in
LENGTH OF BARREL 500 mm 19.69 in
WEIGHT 3.2 kg 7.05 lb
M.V. 580 m/s 1900 ft/sec
MAGAZINE CAPACITY 5 rounds

8 mm Repetier-Gewehr Modell 1895

8 mm Repetier-Stutzen-Gewehr Modell 1895



Puska 8 mm M 93MR

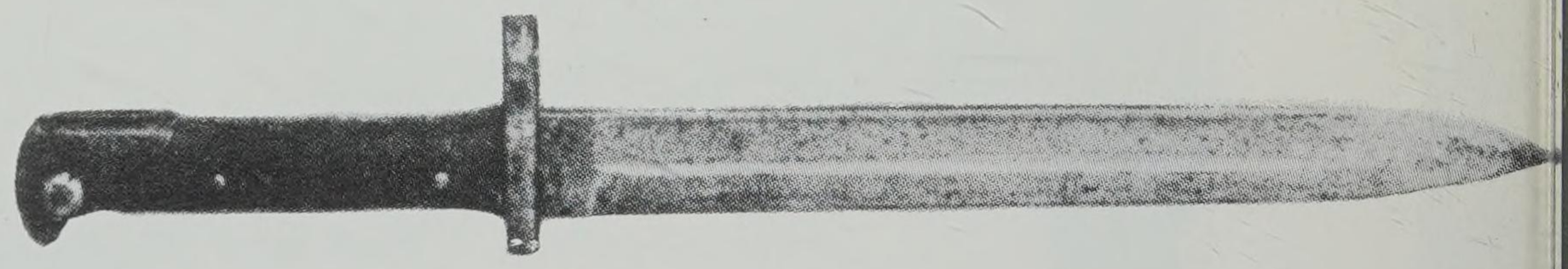
Mannlicher Modell 1893

While the standard service Mannlicher rifle used by the Austro-Hungarian army w a straight-pull bolt action rifle, there was another Mannlicher series that used 'turn-bolt' action. This series began during a series of experiments that started in t late 1880s and culminated in the Modell 1892. This version was sold to the Rum nian Army as their Model 1893, firing a rimless 6.5 mm cartridge. The Model 18 saw service during World War 1 but, after that date, it was gradually supplement by more modern French and Belgian rifles. Some of these old Rumanian rifles we sold to Jugoslavia where they were rechambered to 8 mm as the Puska 8 m M 93 MR, later to be used in small numbers by occupation and Serbo-Croat un allied to the Germans. The German designation was 8 mm Gew 307(j).

Another nation that bought the Modell 1893 was Holland (see below).

DATA

CALIBRE 6.5 and 8 mm 0.256 and 0.315 in
LENGTH 1230 mm 48.4 in
LENGTH OF BARREL 730 mm 28.7 in
WEIGHT 4 kg 9 lb
M.V. 730 m/s 2400 ft/sec
MAGAZINE CAPACITY 5 rounds



Bayonet for Puska 8 mm M 93MR

Mannlicher Modell 1895

In 1895 the Dutch Army adopted the Mannlicher Modell 1895, a rifle virtually same as the Modell 1893 and using the same 6.5 mm calibre. Most of the Du weapons were produced at the State Armoury at Hemberg, and the Dutch desig tion was Geweer M 95. The Dutch also produced a long list of carbine versions of Geweer M 95, all of which differed only in such small items as swing swivels handguards. These carbines were all produced in two sub-versions, the OM model) and NM (new model). After 1940, most of these Dutch weapons were u by occupying German formations and the German designation is given in the ch list below, where appropriate.

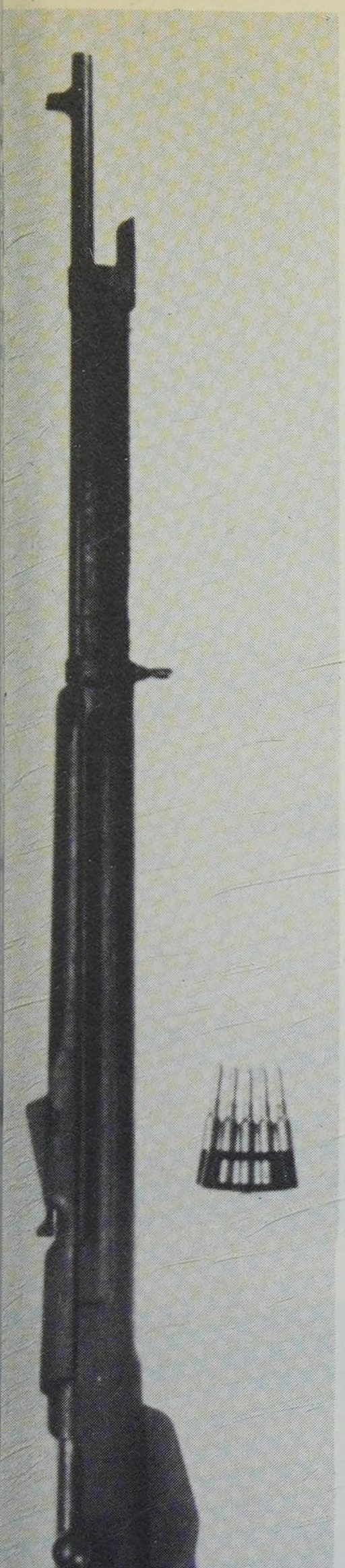
Gewer m 95 *6.5 mm Gew 211(h)*
Karabijn aantal 1 OM and NM *6.5 mm Kar 412(h)*
Karabijn aantal 1 (Colonial model) *6.5 mm Kar 411(h)*
The Karabijn aantal 1 versions were intended for cavalry use.
Karabijn aantal 2 OM and NM
Used by the Dutch Gendarmerie.
Karabijn aantal 3 OM and NM *6.5 mm Kar 413(h)*
A further variation of the aantal 3 was the Karabijn aantal 3 Gewijzigd (modified)
Karabijn aantal 4 OM and NM *6.5 mm Kar 414(h)*
Karabijn aantal 5
The Karabijn aantal 5 was produced for the Dutch Air Force by cutting down old Geweer M 95 rifles. Not many appear to have been produced.

DATA (Geweer M 95)

CALIBRE 6.5 mm 0.256 in
LENGTH 1295 mm 51 in
LENGTH OF BARREL 790 mm 31.1 in
WEIGHT 4.35 kg 9.6 lb
M.V. (approx) 7.30 m/s 2400 ft/sec
MAGAZINE CAPACITY 5 rounds

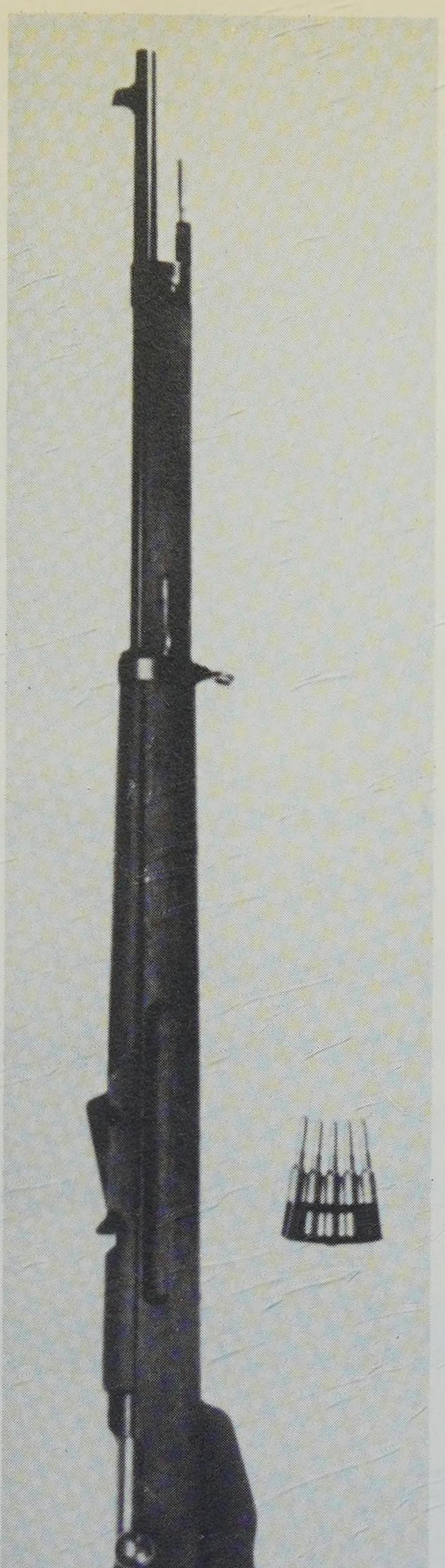
(Karabijn aantal 4 NM)

CALIBRE 6.5 mm 0.256 in
LENGTH 951 mm 37.44 in
LENGTH OF BARREL 448.6 mm 17.66 in
WEIGHT 3.367 kg 7.423 lb
MAGAZINE CAPACITY 5 rounds



Far left: Mannlicher Model 1895

Left: Model 95 introduced in 1897 for Royal Netherlands Indies Army. Modified in 1911.



Karabijn No. 1 O.M.

Karabijn No. 4 en 4 O.M.

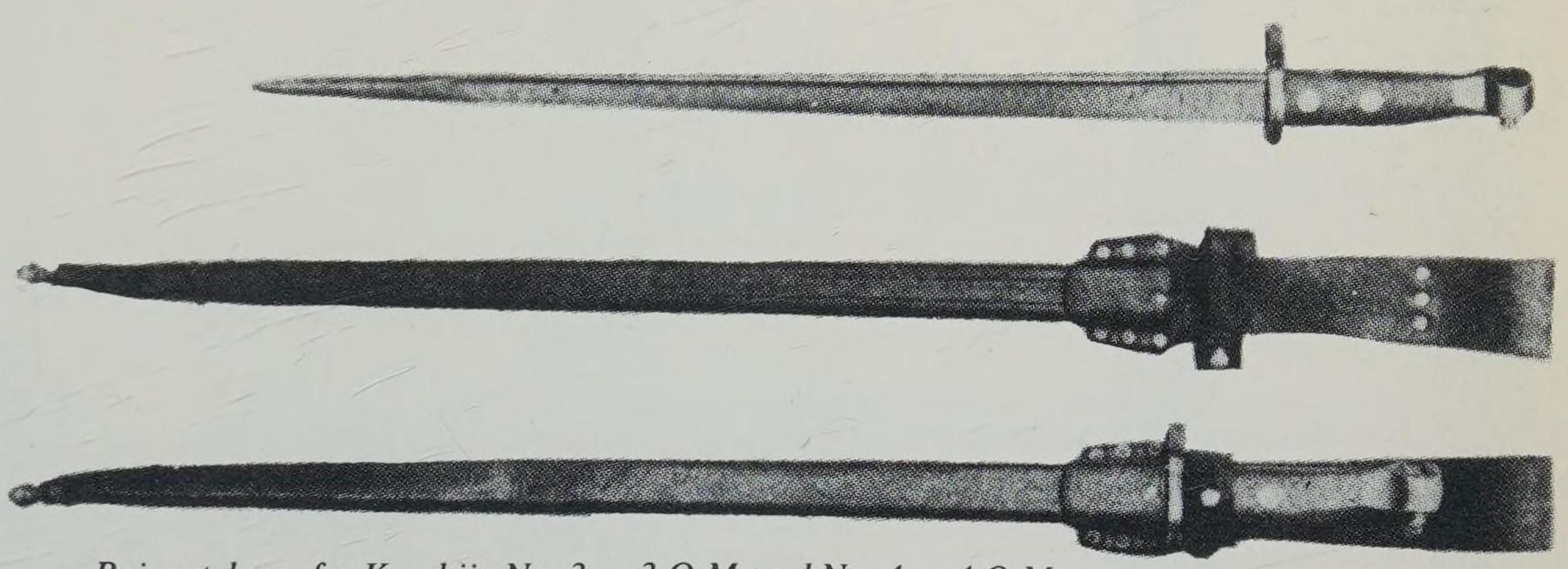
Karabijn No. 3 en 3 O.M.

Bajonet 95a/A for Geweer M.95

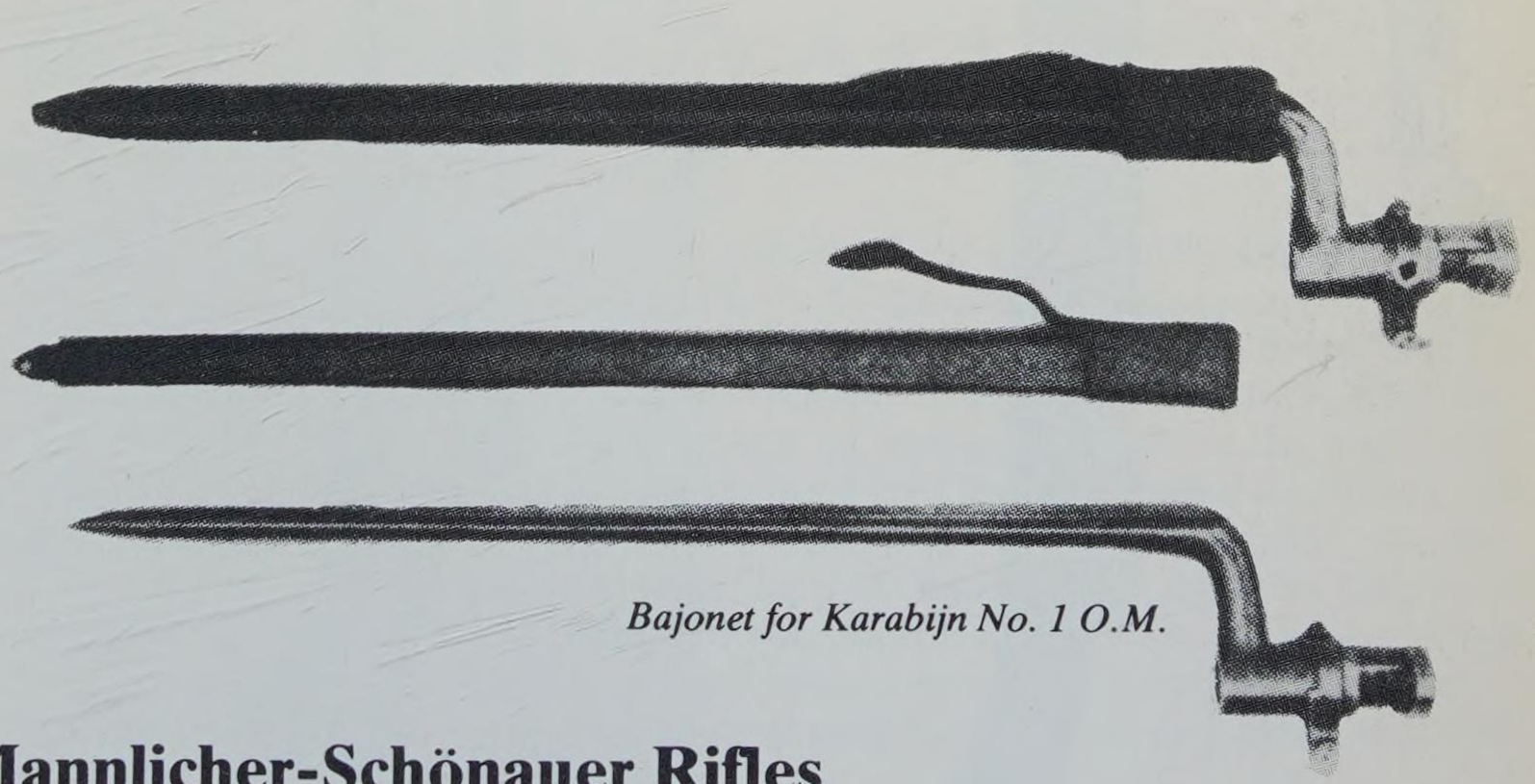
Bajonet 95 for Geweer M.95

Bajonet, kort, for Karabijn No
No. 3 en 3 O.M. and No. 4 en 4 O.

h troops in action,
, with Geweer M 95



Bajonet, lang, for Karabijn No. 3 en 3 O.M. and No. 4 en 4 O.M.



Bajonet for Karabijn No. 1 O.M.

Mannlicher-Schönauer Rifles

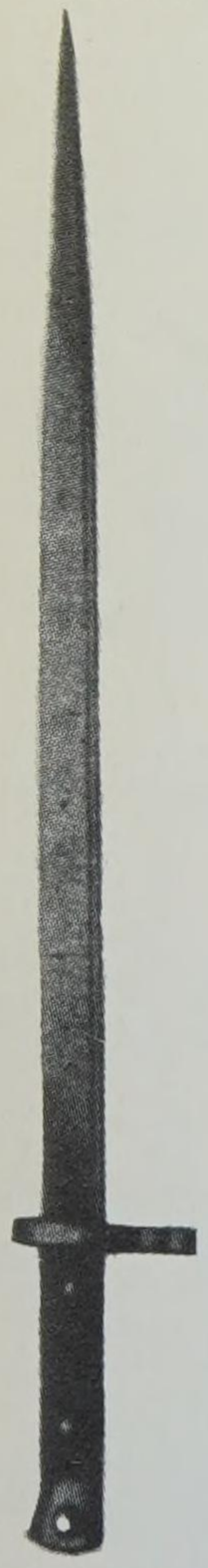
During the 1890s some research work was carried out into various types of rifle magazines and one type considered was the rotary. Most firearm designers rejected the type as it had little to recommend it on the grounds of ease of manufacture, reliability or cost. One designer, Otto Schönauer, did however perfect a rotary magazine and offered it to the Mannlicher concern who were sufficiently impressed to manufacture and offer a Mannlicher-Schönauer rifle to the Austro-Hungarian authorities. They turned it down as the Model 1895 rifle was already in production, and the only army to buy the weapon was that of Greece who adopted the type as the Model 1903. The Greek order was manufactured by Steyr and, in 1914, some changes were made (and retrofitted) to change the designation to Model 1903/14, or 03/14. In 1927 further numbers were made by the Italian firm of Breda to replace numbers lost during World War 1. The Model 03/14 was loaded from a clip and, if the magazine had to be unloaded, this was done by pressing a plunger to the right of

DATA (03/14)
CALIBRE 6.5 mm 2.36 in
LENGTH 1228 mm 48.35 in
LENGTH OF BARREL 725 mm 28.55 in
WEIGHT 3.77 kg 8.31lb
M.V. 678 m/s 2225 ft/sec
MAGAZINE CAPACITY 5 rounds

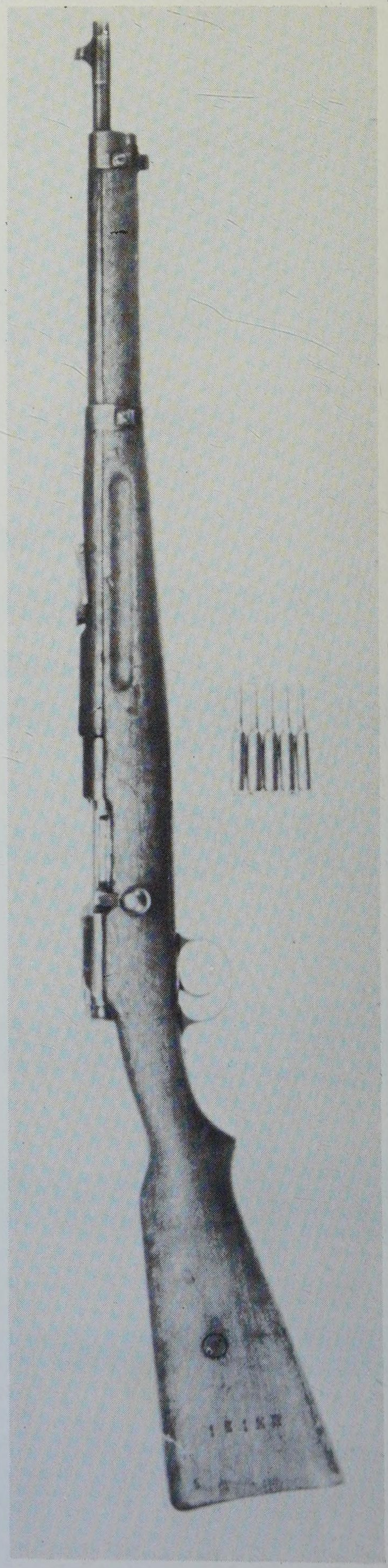
the bolt which enabled a spring to unload the rounds. By 1939 the 03/14 was longer the only rifle in Greek use, and in 1941 a few were used by the Germans as Gew 215(g), mainly by occupation forces, and some were used by the Jugo partisans.

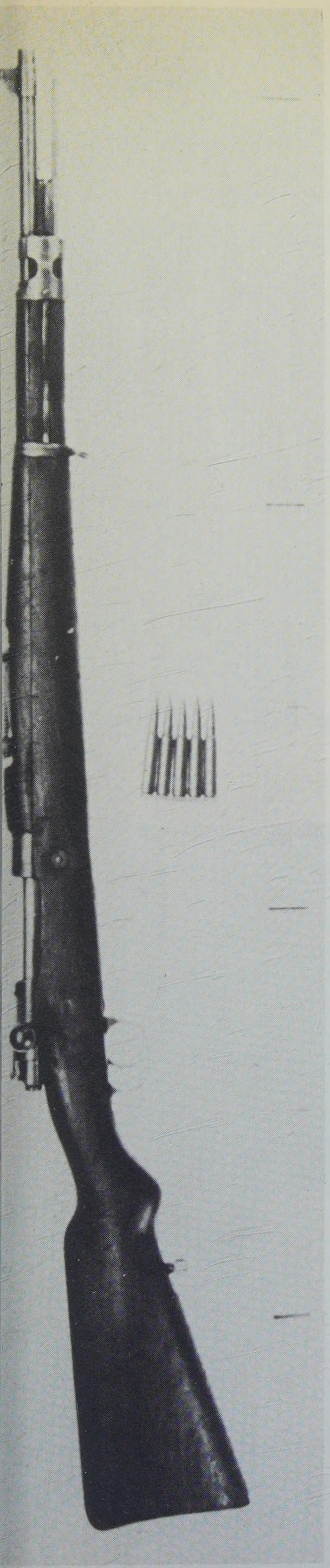
There were two carbine versions of the Model 1903. The Model 1903 carbine a short Model 1903 rifle, and the Model 1903/14 carbine could be fitted wi bayonet.

1. *Mannlicher-Schönauer Model 1903/14.* **2.** *Mannlicher-Schönauer Model 1903, Rifle.* **3.** *Mannlicher-Schönauer Model 1903, Car*



Bayonet for M-S, Model 1903/14



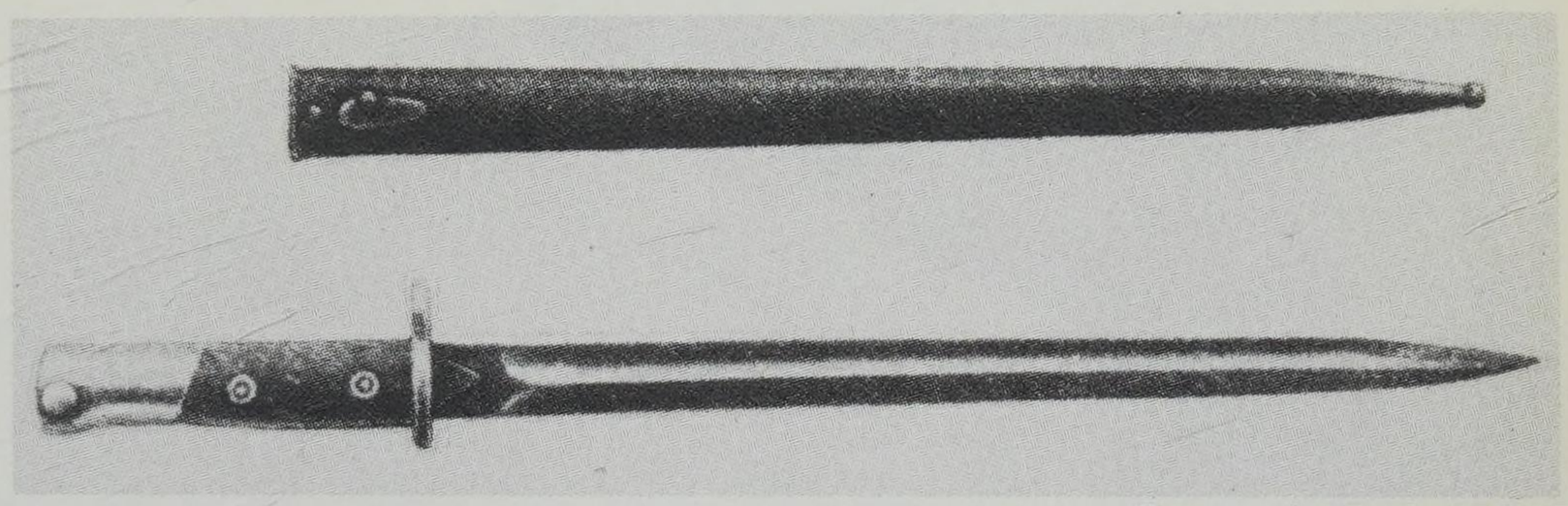


Steyr Mauser Rifles

Most of the output of the Austrian Steyr-Werke was directed towards producing Mannlicher rifles, but an 'auxiliary' line was directed towards turning out Mauser rifles, both for sporting and military use. From time to time, orders for Mauser rifles were directed to Steyr, who produced Mauser actions and rifles for many countries. In time, the Steyr production lines were redirected to producing a version of the Kar 98k known as the 7.92 mm Gew 29/40 (qv) but, before that, Steyr rifles were common in the Middle East and South America. It was from America that Steyr rifles came to be involved in World War 2, albeit on a small scale, via Mexico. In 1912, Mexico obtained a batch of rifles known as the Steyr Modell 1912 B. These were used by various Mexican army units until 1924, when the new Jugoslav state was so short of modern arms that it bought a batch, which then became the Puska 7.9 mm M 24 B. A batch of carbines, Karabini 7.9 mm M 24 B also from Steyr, was also involved in the transaction. After 1941, these much-travelled weapons were used by the Wehrmacht as the Gew 291/2(j) and Kar 491/2(j).

Steyr rifles were also encountered in Ethiopia and (inevitably) China.

DATA (Modell 1912 B)
CALIBRE 7.9 mm 0.312 in
LENGTH 1094 mm 43 in
LENGTH OF BARREL 589 mm 23.2 in
WEIGHT 3.9 kg 8.6 lb
M.V. 823 m/s 2700 ft/sec
MAGAZINE CAPACITY 5 rounds



Bayonet for Puska M 24 B

Puska 7.9 mm M24 B.

CZECHOSLOVAKIA

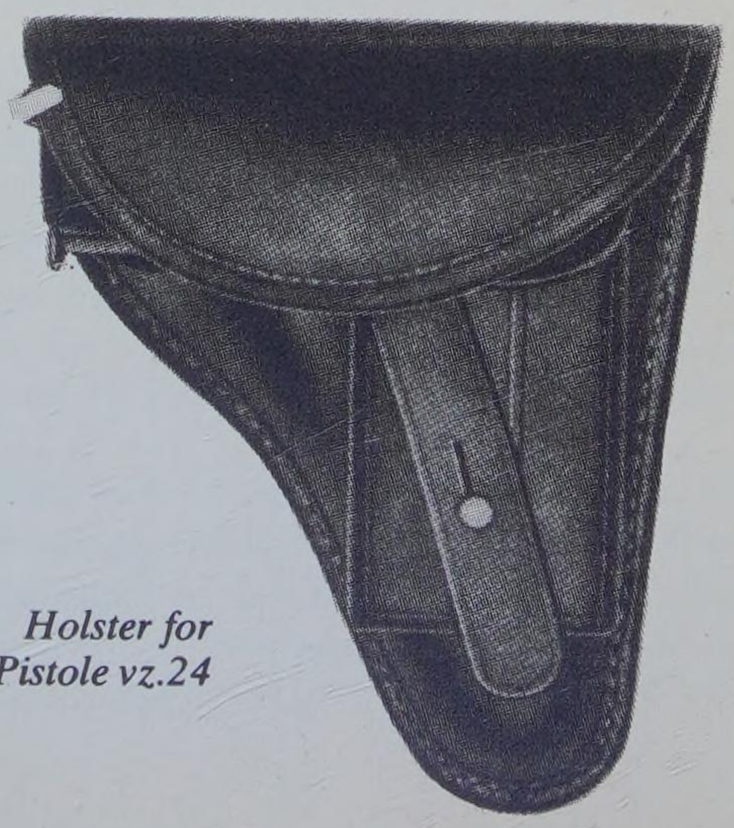
Automaticky Pistole vz.27

The vz.27 pistol was a progressive development of the earlier vz.22 and 24 models. The vz.22 had a rotating barrel lock and the vz.24 featured a magazine safety, but the vz.27 was a straightforward blow-back weapon. All three pistols were designed by one Josef Nicki, the same designer who was responsible for the Walther pistols so it is not surprising that there were many points of similarity between the vz.27 and Walther PP weapons. The vz.27 was produced by Ceskoslovenska Zbrojovka, of Praze, and it became one of the standard Czech service pistols. After 1938, production was continued for the Germans as the 7.65 mm P 27(t), and the plant was renamed the Böhmische Waffenfabrik. Production went on right through the war and continued after 1945. A few vz.27 versions were made in 9 mm short calibre.

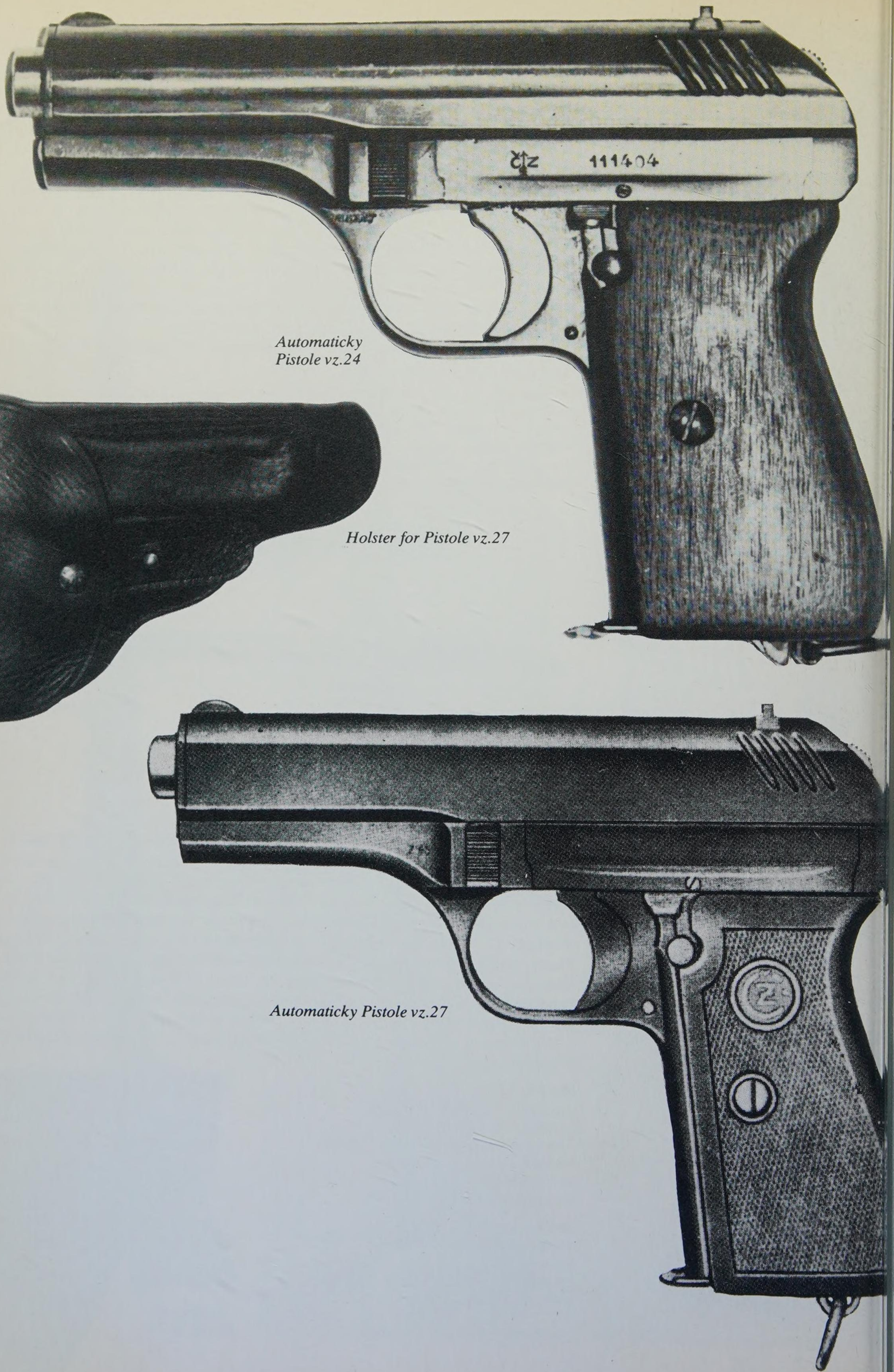
Numbers of the earlier vz.24 pistols were used by the German Luftwaffe as the 9 mm P 24(t).

DATA (vz.27)
CALIBRE 7.65 mm 0.302 in
LENGTH 165 mm 6.5 in
LENGTH OF BARREL 97 mm 3.82in
WEIGHT 0.7 kg 1.56 lb
M.V. 280 m/s 919 ft/sec
MAGAZINE CAPACITY 8 rounds

DATA (vz.24)
CALIBRE 9 mm 0.354 in
LENGTH 152 mm 6 in
LENGTH OF BARREL 91 mm 3.55 in
WEIGHT 0.7 kg 1.5 lb
M.V. 295 m/s 970 ft/sec
MAGAZINE CAPACITY 8 rounds



Holster for Pistole vz.24



Automaticky Pistole vz.24

Holster for Pistole vz.27

Automaticky Pistole vz.27

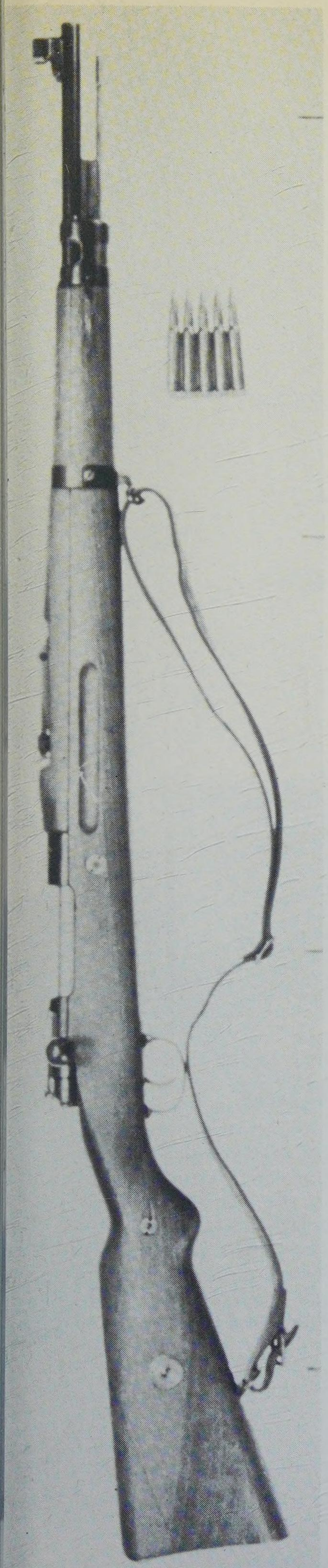
Automaticky Pistole vz.38

The vz.38 owed little to previous Czech pistol designs and was a double-action, blow-back design. Like the vz.27, it was produced by CZ of Prague, but production had only just started when the State was taken over by Germany, and production was continued for the German forces as the 9 mm P 39(t). This pistol fired 9 mm short ammunition, and it was very easy to strip for repairs or cleaning.

DATA

CALIBRE 9 mm 0.354 in
LENGTH 198 mm 7.8 in
LENGTH OF BARREL 118 mm 4.65 in
WEIGHT 0.94 kg 2.07 lb
M.V. 299 m/s 980 ft/sec
MAGAZINE CAPACITY 8 rounds

Automaticky Pistole vz.38



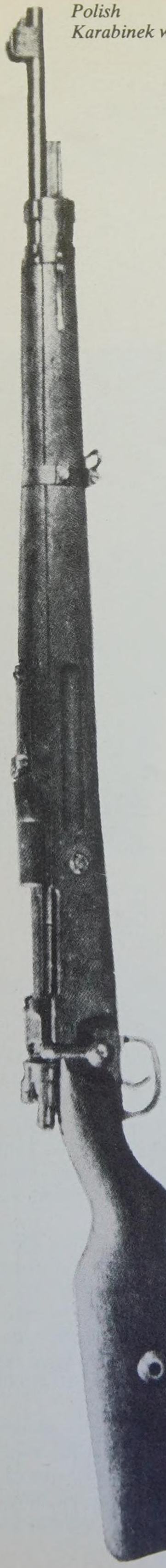
Czech vz.24 Rifle

Czech Mauser Rifles and Carbines

After 1919, the new state of Czechoslovakia soon set up its own armament industry, and for a short while continued to produce Mannlicher rifles. However, it was not long before an arrangement was made with Mausers to produce Mauser designs. Production was carried out by Ceskaslovenske Zobrojovka Brno, and this firm, usually known in the West as 'ZB' took over much of the arms export business between the wars along with the Belgian FN concern. The first models produced were the rifles vz.98/22, and vz.98/29 – the later model was produced for Iran. The vz.98/22 was sold to Rumania. Short rifles or carbines produced were the Musketon vz.98/29 (for Iran), the vz.12/33 and vz.16/33. The latter model was later used by the Germans as the Gew 33(t) and production was continued after 1939 as the Gew 33/40 (qv).

The main Czech service rifle was the Puska vz.24, developed from the earlier Puska vz.23a. This weapon was also widely exported to the Middle East and South America. Like its Belgian counterpart, the mle 24, the vz.24 was very similar in many respects to the later German Kar 98k and, when Germany took over the production lines after 1939, it took only a few changes to produce the Kar 98k. In 1939, the vz.24 entered the German Armoury as the 7.9 mm Gew 24(t), and it has been said that during the invasion of France in 1940, eleven German divisions were using the Gew 24(t)

The vz.24 also came to the Germans from two other sources – Poland and Jugoslavia. Poland selected the vz.24 as the standard Polish service rifle, but it never did supplant the earlier Mauser weapons already in service. But enough were produced in Poland, as the karabinek wz.29, for the Germans to use later as the 7.92 mm Gew 29(p). Some of these Polish rifles found their way to Jugoslavia where

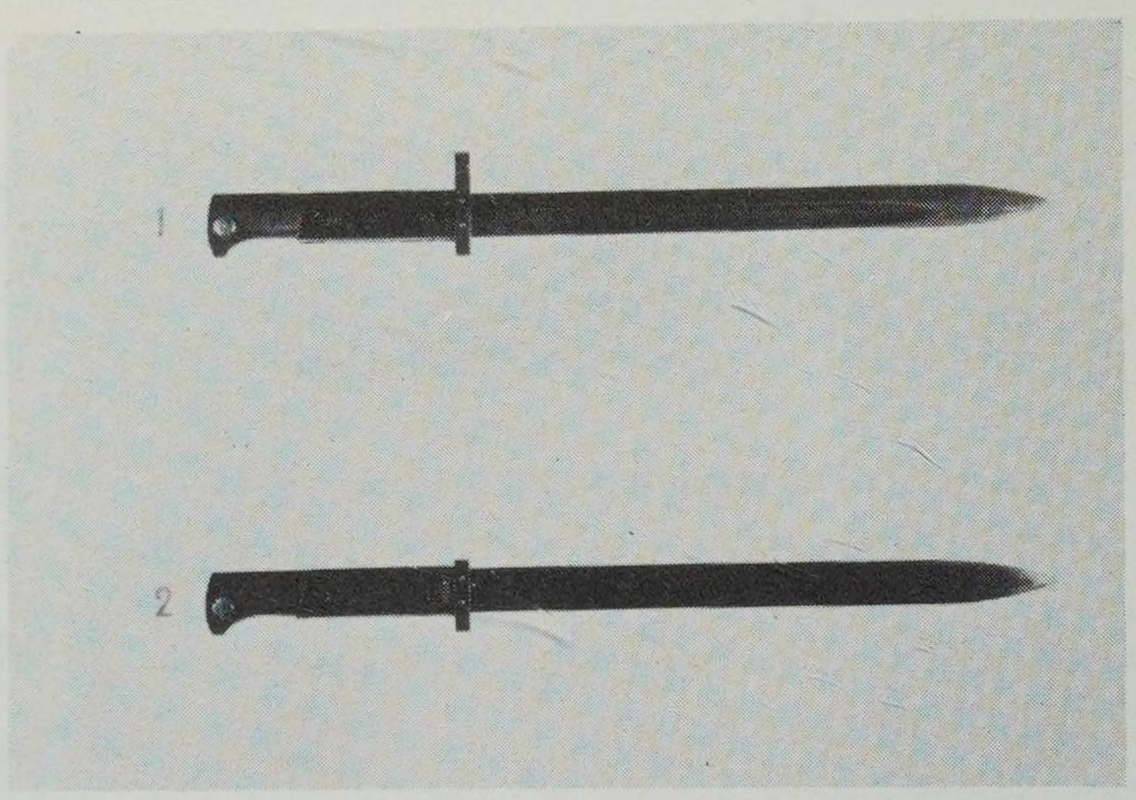


Polish Karabinek wz.29

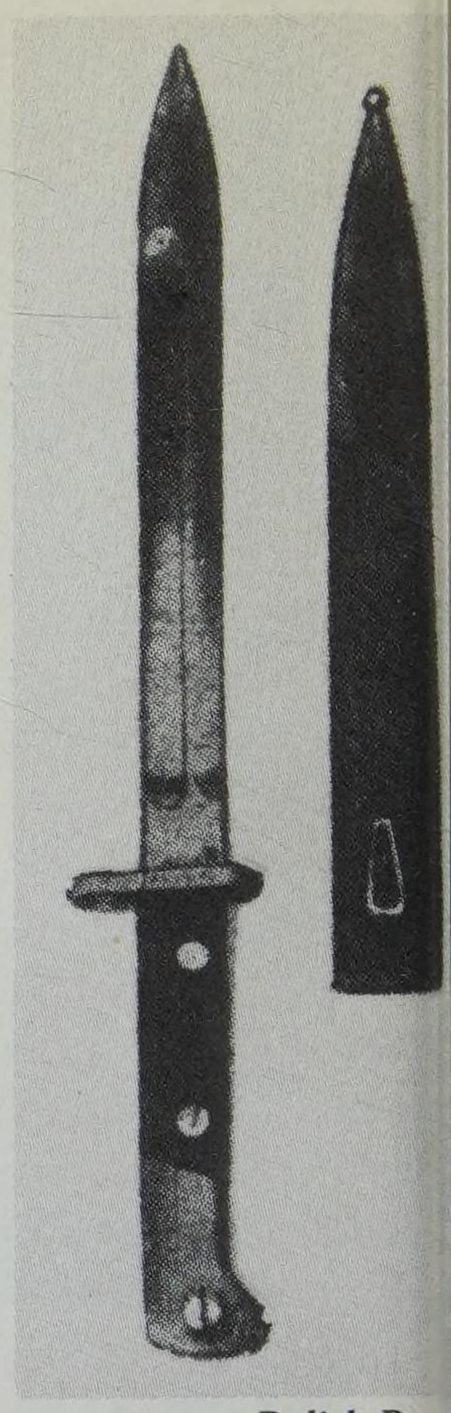
they were known as the Puska 7.9 mm M 29, later to fall into German hands as Gew 298(j). Numbers of Czech-produced vz.24 rifles also found their wa Jugoslavia. These were known as the Puska 7.9 mm M 24, later to become Gew 290(j).

Rumania also produced the vz.24 for her own army.

DATA (vz.24)
CALIBRE 7.92 mm 0.312 in
LENGTH 1100 mm 43.3 in
LENGTH OF BARREL 590 mm 23.23 in
WEIGHT 3.9 kg 8.6 lb
M.V. 823 m/s 2700 ft/sec
MAGAZINE CAPACITY 5 rounds



Czech Bayonets. No. 2 has muzzle ring removed by Germans, this was used on Czech rifles in service with German Armed Forces.



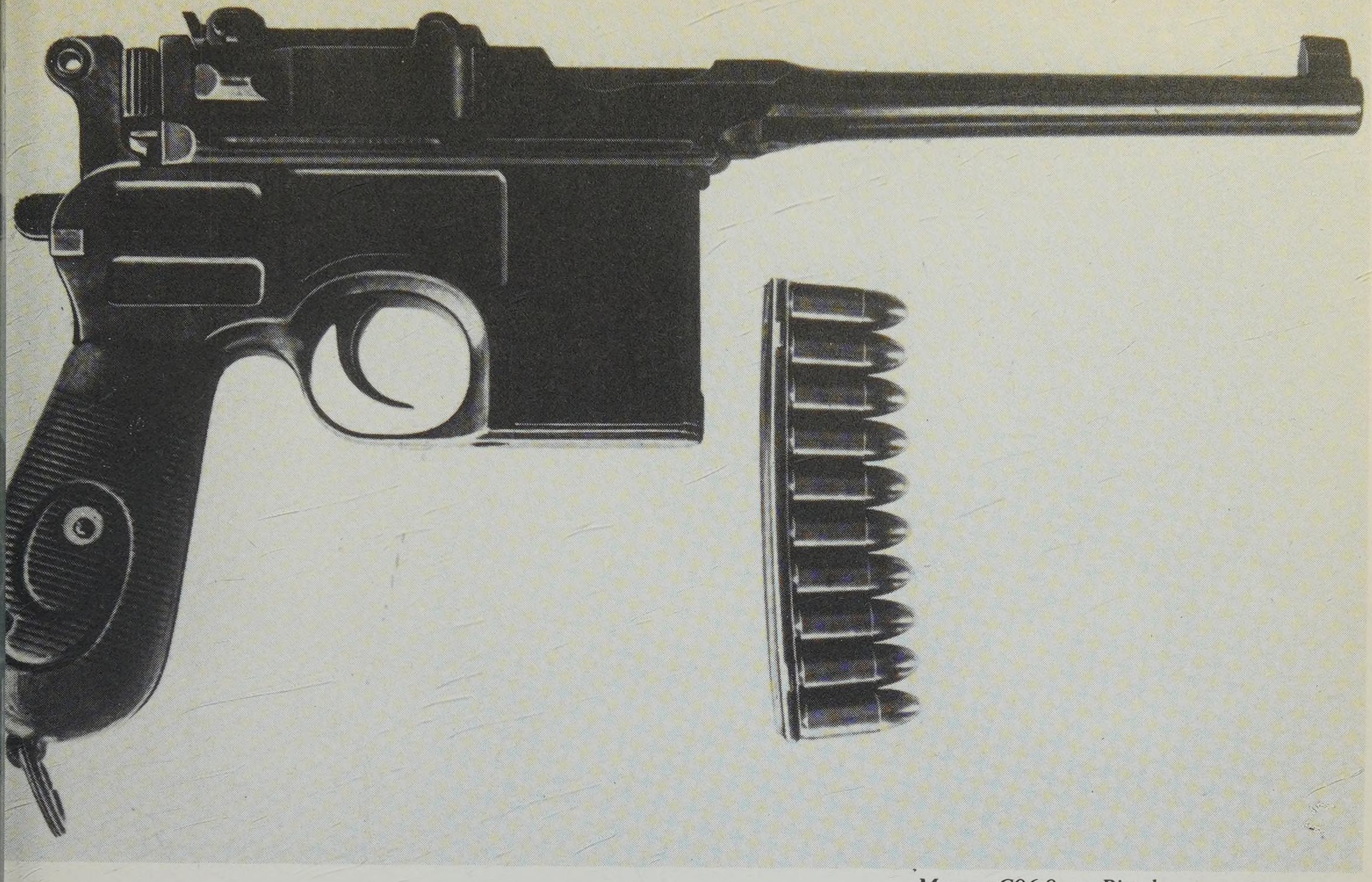
Polish Bayo for Karabinek w

GERMANY

The Mauser C96 Pistols

By 1939 the basic design and concept of the large, bulky and awkward Ma C96 was obsolete, but it was still in service, not only with the German forces but v many other armies all over the world. The main reasons for this seeming an hronism were that the C96 fired a very powerful 7.63 mm or 9 mm round to a us range, and that its appearance had an undoubted 'aura'. The first Mauser autom pistols based on the C96 concept appeared in 1896 and thereafter they were ma large numbers in a wide range of calibres and models, for both commercial military markets. By 1939 the main type still in German service was the comme model M712 or Schnellfeuer, which could be fitted with a 10, 20 or 40 ro magazine for use as a selective-fire weapon. Even when using the wooden holster butt this pistol was not very accurate due to the high fire rate, but it was m favoured by German military police and SS units until 1945. Others were sol small numbers to China and Jugoslavia. The basic C96 design was copied produced in Spain and China, and some Chinese copies were produced in .4 calibre. Of the non-Schnellfeuer models still in German use in 1939 the m common was the Model 1910 in both 7.63 mm and 9 mm, many of which w produced during World War 1.

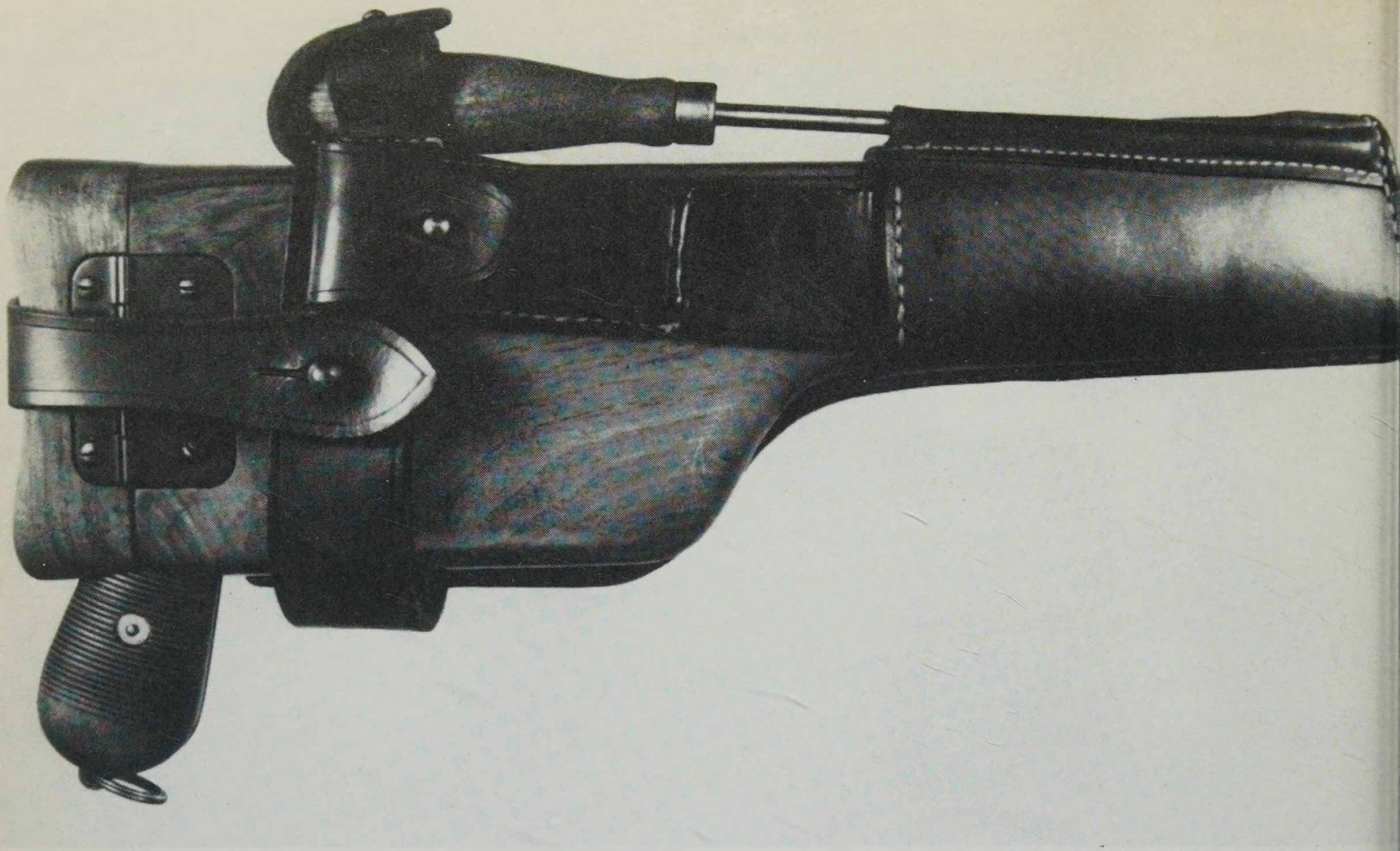
DATA (Schnellfeuer)
CALIBRE 7.63 or 9 mm .30 or .354 in
LENGTH WITHOUT BUTT
298.5 mm 11.75 in
LENGTH WITH BUTT 647 mm 25.5 in
LENGTH OF BARREL 139 mm 5.5 in
WEIGHT WITHOUT BUTT 1.33 kg 2.93 lb
WEIGHT WITH BUTT 1.78 kg 3.93 lb
MUZZLE VELOCITY (7.63 mm) 480 m/s
1575 ft/sec
MAGAZINE CAPACITY 10, 20 or 40 round



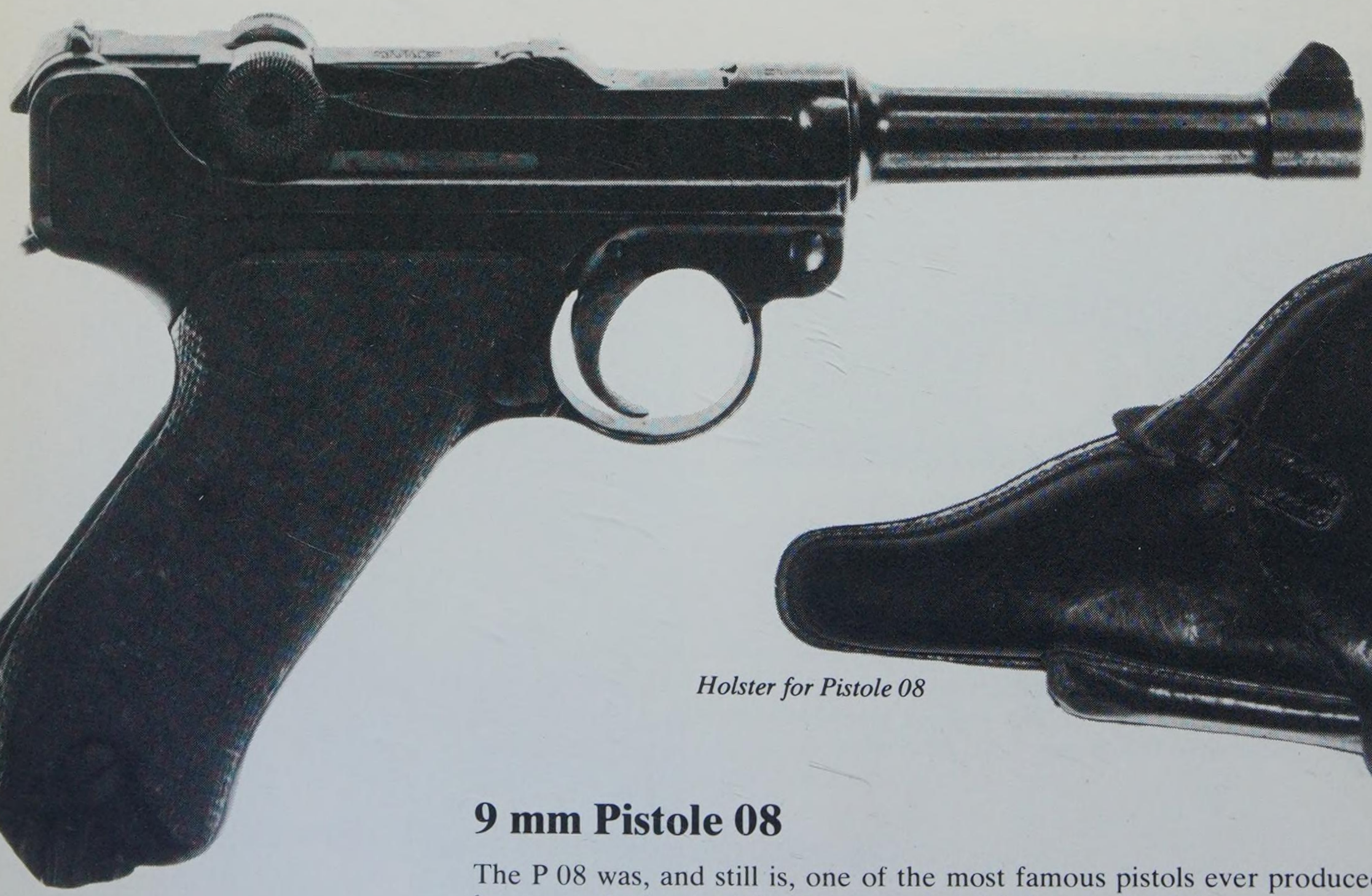
Mauser C96 9mm Pistole

Mauser C96 7.63 mm Pistole

The Mauser pistole with wooden stock being used in action.



Holster and wooden stock for Mauser



9 mm Pistole 08

Holster for Pistole 08

9 mm Pistole 08

The P 08 was, and still is, one of the most famous pistols ever produced. Usu known as the Luger, it has been produced in hundreds of thousands and to this remains synonymous with German military authoritarianism. The first milit Lugers were made in 1900 to a Swiss order, and the type was adopted for the Gerr Navy in 1904. The German Army followed in 1908, hence the P 08, and this mo was the main production variant (there are at least 35 Luger variants). The P 08 the standard Wehrmacht pistol until 1938 when the P 38 was introduced to repl it, but the P 08 remained in production until 1943 and by 1945 was still in large-s

use as there were never enough P 38s produced for complete replacement. Despite its popularity and 'aura', the P 08 was not a particularly good service weapon as its open toggle mechanism was susceptible to dirt and dust which clogged the action, and it was expensive and difficult to manufacture. But the Luger was a good weapon to fire and handle and it became one of the most prized of all war trophies. The most common version of the P 08 had a 4 in barrel but the naval variant barrel was 6 in long – the long-barrel P17 'Artillery' model does not appear to have been used as a service weapon in World War 2. Non-German service users were Finland, Persia, Switzerland, Latvia and Bulgaria. Holland was another user, but their Lugers were produced by the British firm of Vickers in the early 1920s. Most of these Dutch Lugers appear to have been used in the Dutch East Indies where they passed into Japanese service in 1942. Lugers were also in use in Portugal, Turkey, Ethiopia and Rumania. One rather odd use was by the Allied SOE who used small numbers fitted with special silencers as assassination weapons.

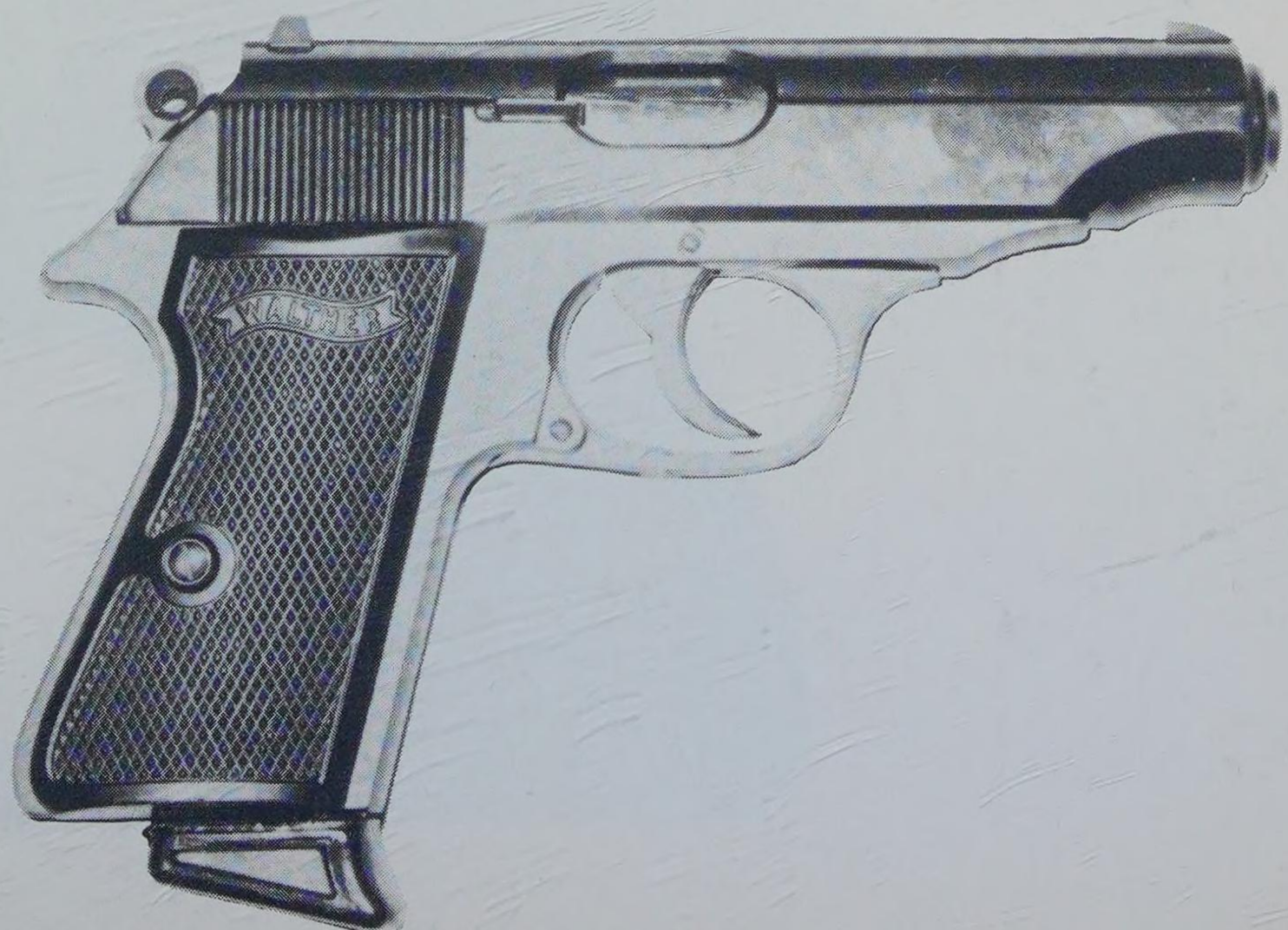
A
E 9 mm 0.354 in
H 222 mm 8.75 in
H OF BARREL 103 mm 4.06 in
T 0.876 kg 1.93 lb
320 m/s 1030 ft/sec
INE CAPACITY 8 rounds

08 pistole in action, note egg grenade

Walther Model PP

Introduced in 1929, the Walther PP was originally intended as a police weapon (PP – Polizei Pistole). It embodied the Walther double-action trigger mechanism later used on the P 38, a lightweight receiver, and a signal button next to the hammer which protruded when the weapon was loaded. The overall design was light and slim. After 1939 the PP was produced for military use in both 7.65 and 9 mm calibres. Owing to the small size of the PP, most of these military weapons were issued to the Luftwaffe and Panzer units. As the war continued, the high standard of manufacture of the PP pistols was relaxed and many were produced without the signal button.

E 7.65 or 9 mm 0.301 or 0.354 in
H 162 mm 6.38 in
H OF BARREL 85 mm 3.35 in
T 0.708 kg 1.56 lb
E VELOCITY (7.65 mm) 289 m/s
ft/sec
INE CAPACITY 8 rounds



Walther, Model PP

Walther Model PPK

DATA
CALIBRE 7.65 and 9 mm 0.301 and 0.354 in
LENGTH 148 mm 5.83 in
LENGTH OF BARREL 80 mm 3.15 in
WEIGHT 0.568 kg 1.25 lb
M.V. 280 m/s 919 ft/sec
MAGAZINE CAPACITY (7.65 mm) 7 rounds
MAGAZINE CAPACITY (9 mm) 6 rounds

First introduced in 1931, the Walther PPK was a smaller version of the Walther
produced for use by plain-clothes policemen (PPK – Polizei Pistole Kriminal). In
design details except for size the PPK was similar to the PP, and like the PP it was a
used as a military pistol after 1939. The PPK was particularly favoured by
Luftwaffe.

9 mm Pistole 38

DATA
CALIBRE 9 mm 0.354 in
LENGTH 218.5 mm 8.6 in
LENGTH OF BARREL 124.5 mm 4.9 in
WEIGHT 0.95 kg 2.1 lb
M.V. 340 m/s 1115 ft/sec
MAGAZINE CAPACITY 8 rounds

The Walther P 38 was introduced into Wehrmacht service in 1938 as a replacem
for the P 08. It embodied a double-action trigger mechanism developed from
earlier Walther PP and PPK pistols and also used a most valuable signal pin wh
protruded next to the hammer whenever a round was chambered. Despite be
produced in large numbers, the P 38 never did completely replace the P 08 in serv
but it was a very reliable and popular weapon. Production was carried out not onl
Germany but in Belgium and Czechoslovakia also, and the unit cost to the Gerr
Treasury was 32 DM. There were several minor production variations before 19
and some were rather crudely finished, but in service the P 38 proved to be rugg
and reliable and in 1976 it is once more in production for the German Army.

9 mm Pistole 38

Holster for Pistole 38

'A
RE 7.65 mm 0.301 in
TH 165 mm 6.5 in
TH OF BARREL 86 mm 3.375 in
HT 0.59 kg 1.3 lb
290 m/s 950 ft/sec
ZINE CAPACITY 8 rounds

'A
RE 7.65 mm 0.301 in
TH 146 mm 5.75 in
TH OF BARREL 77 mm 3.03 in
HT 0.625 kg 1.38 lb
274 m/s 900 ft/sec
ZINE CAPACITY 7 rounds

Mauser Model HSc Pistol

The Mauser HSc was introduced in 1935 as a commercial competitor in the market dominated by the Walther PP and PPK. It was one of the pistols considered as a possible P 08 replacement and was passed over in favour of the P 38. But in 1939 large numbers were impressed as military weapons, and most appear to have been issued to the German Navy and the Luftwaffe. The Mauser HSc was an attractive-looking pistol with an enclosed double-action trigger mechanism, and was often referred to by the Germans as the Mauser Pistole neuer Art (MnA). It remained in production until 1945. As the war continued, the finish and some details were revised to a lower standard, but production continued after the war.

Sauer Model 30

The Sauer M30 was an updated version of the earlier M14, used during World War 1. During World War 2 the M30 was used by many military police units and also by some second-line Wehrmacht formations. Often referred to as the 'Behorden' (Authorities) model, the M30 was a blow-back automatic pistol which was rather unusual in having the bolt externally visible.

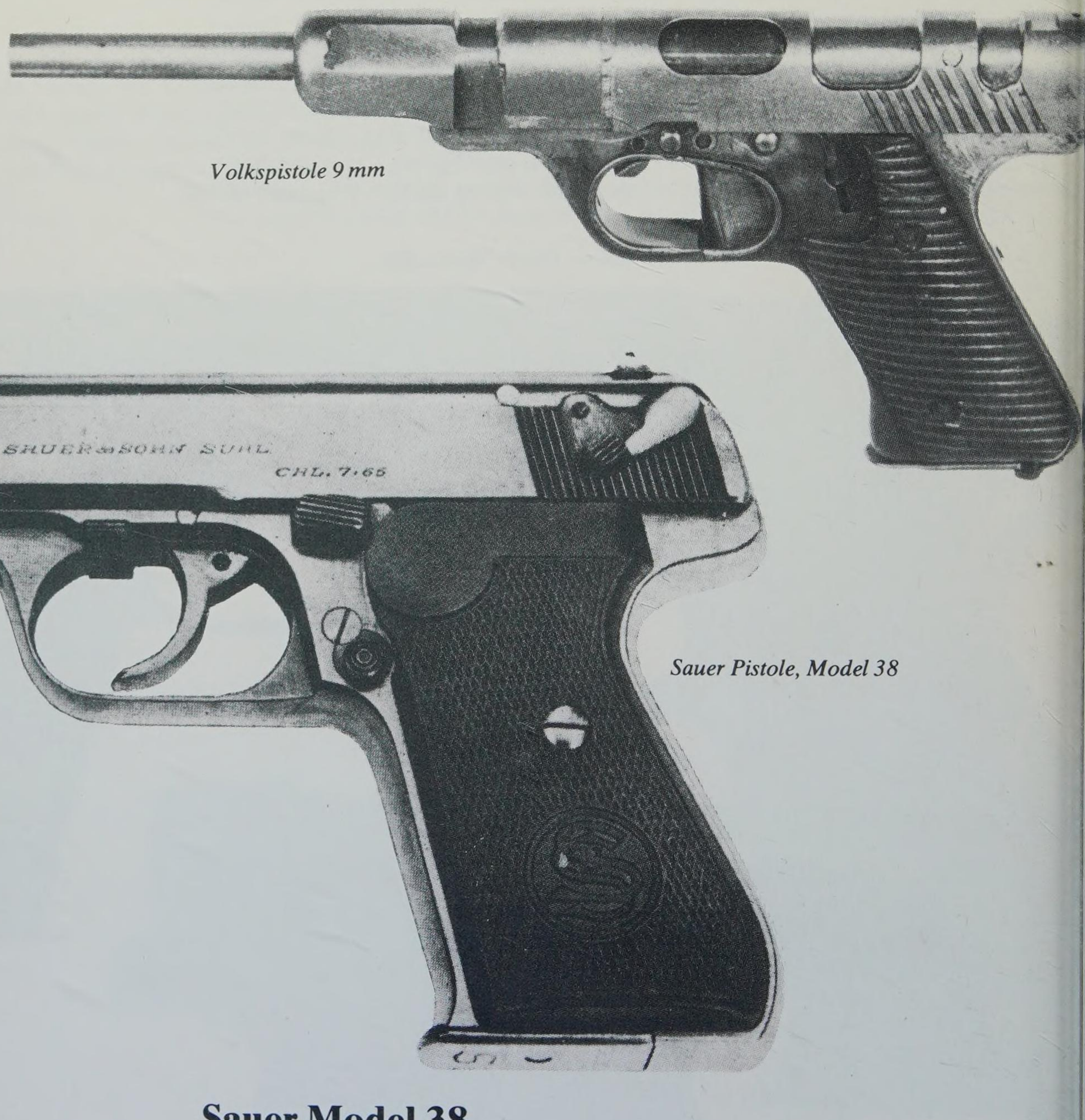
Mauser Pistole, Model HSc

Sauer Pistole, Model 30

9 mm Volkspistole

DATA
CALIBRE 9 mm 0.354 in
LENGTH 286 mm 11.25 in
LENGTH OF BARREL 130 mm 5.13 in
WEIGHT 0.96 kg 2.12 lb
MUZZLE VELOCITY (approx) 381 m/s 1250 ft/sec
MAGAZINE CAPACITY 8 rounds

Although the Volkspistole does not appear to have been issued for service use, it included to demonstrate the lengths the Germans were prepared to go to in order get some form of weapon into the hands of the troops defending Germany during t last months of the war. The parentage of the Volkspistole is uncertain, but the over design was simple, easy to produce and crude. The mechanism was a delay blow-back with gas from the chamber being used to delay the rearwards moveme of the slide. A smooth-bore extension was fitted to the front of the barrel to make t blow-back delay more assured. Exactly how many of these crudely-finished pist were actually made is uncertain, and very few were ever captured. Of the captur examples, there does not appear to be any final design as there are numero variations between them. The data below is taken from only one example.



Volkspistole 9 mm

Sauer Pistole, Model 38

Sauer Model 38

DATA
CALIBRE 7.65 mm 0.301 in
LENGTH 171 mm 6.75 in
LENGTH OF BARREL 83 mm 3.27 in
WEIGHT 0.72 kg 1.58 lb
M.V. 280 m/s 920 ft/sec
MAGAZINE CAPACITY 8 rounds

The Sauer M38H was a very advanced design of automatic pistol intended for pol work which was introduced just before World War 2 began. As a result, it saw f commercial sales and was impressed as a military weapon; it was used by t Luftwaffe and some Panzer forces. The M38, as the M38H was known to t German forces, had several novel features in addition to its double action trigg The firing pin could be lowered onto a loaded round for safety and recocked by t use of a small cocking lever on the left side of the pistol. When the safety was appl the mechanism was virtually fool-proof, and all the mechanism was well-enclosed the war had not intervened, the Sauer M38 might have emerged as one of the fin pistols of its generation but, despite remaining in production until 1945, it is still lit known outside Germany.

Belgian Carabine,
Modell 1889

Belgian Fusil,
Modell 1889

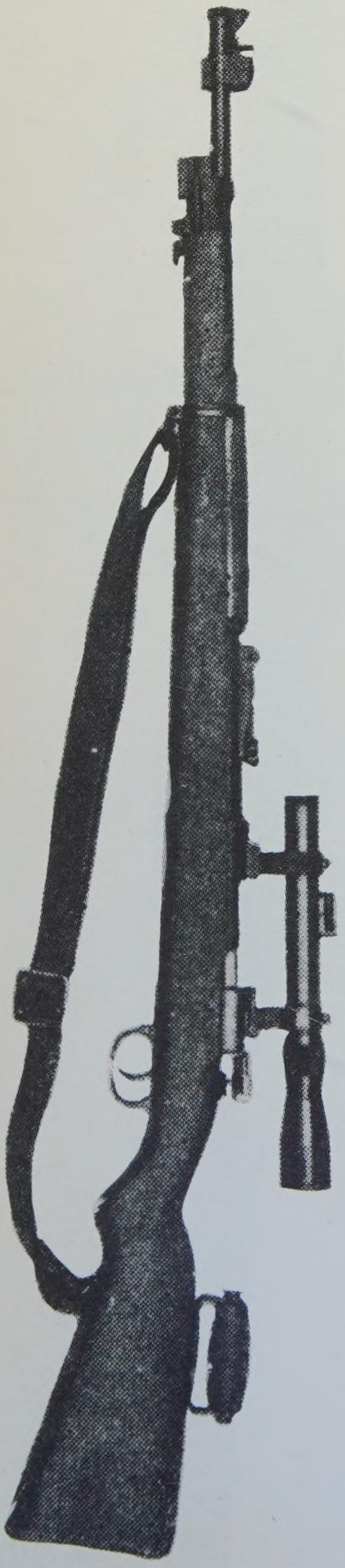
lauser, Modell 1888

Mauser Modell 1888

Although generally known as the Mauser Modell 1888, the rifle known by this nam was actually a combination of Mauser and Mannlicher systems known as th Reichs-Commissions-System. The result was the Gew 88 but it had a short servi life with the German Army as it was soon superseded by the later rifles with th Mauser frontal lock. But many Gew rifles were produced in a variety of calibres, an many went for export. High on the list of buyers was China – they not only boug large numbers, but manufactured their own copy at the Hanyang arsenal as the Typ 88 Hanyang. Many of these were still in use after 1939. In the same year there we still large numbers in use in Jugoslavia (Puska 7.9 mm M 88), and some versio were captured in North Africa with Polish markings. Others were still in use in par of South America and the Middle East.

DATA (Gew 88)
CALIBRE 7.92 mm 0.312 in
LENGTH 1240 mm 48.8 in
LENGTH OF BARREL 740 mm 29.15 in
WEIGHT 3.82 kg 8.44 lb
M.V. 640 m/s 2100 ft/sec
MAGAZINE CAPACITY 5 rounds

Belgian Fusil 35, Snipers' Rifle



Mauser Modell 1889

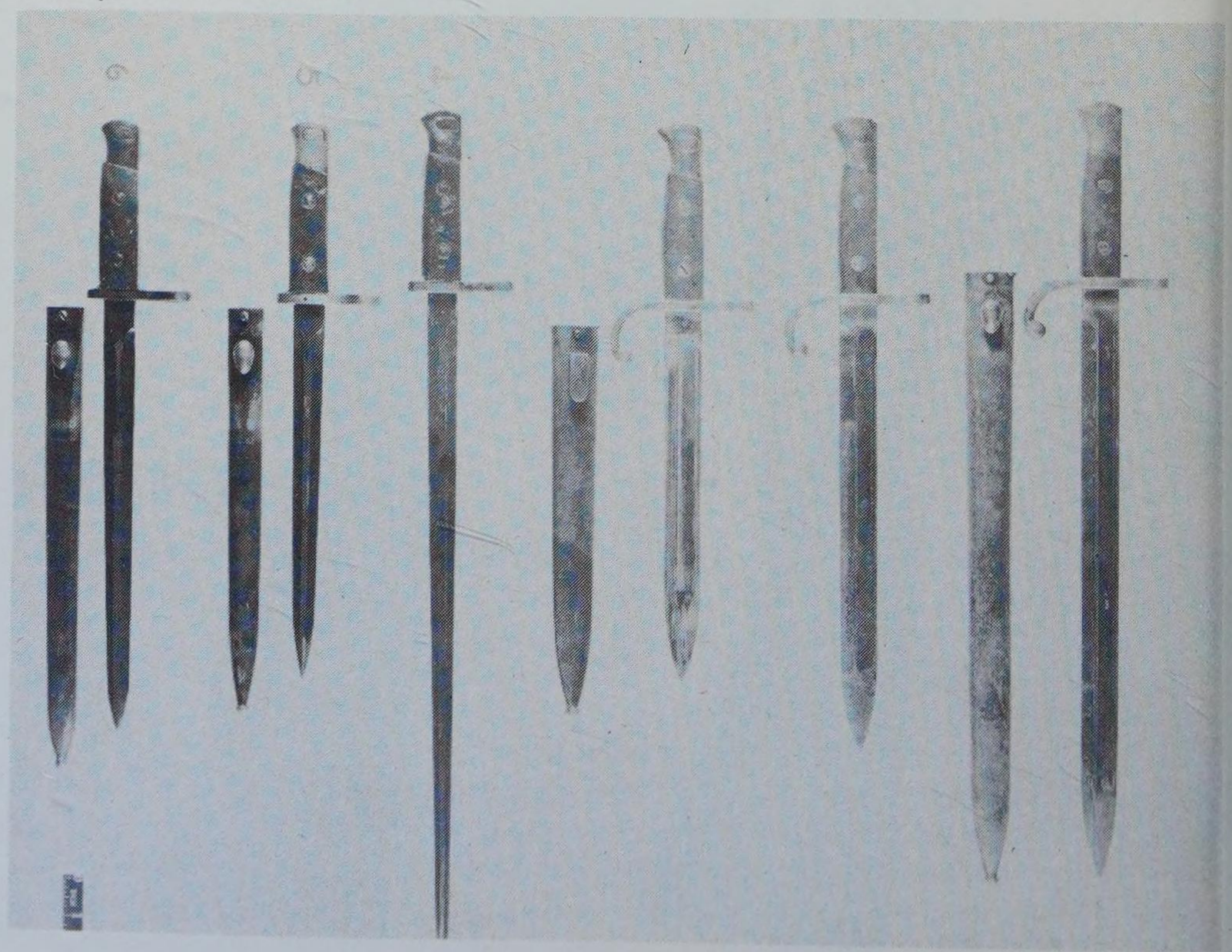
Although the Modell 1889 was a Mauser design it was built almost exclusively by th Belgian FN plant at Herstal. The design was the first incorporating the Mauser fro locking lobes. Belgium adopted the type as its standard service rifle and it remaine so until World War 2. As usual there were two main models, the Fusil 1889 and th Carabine 1889. There were minor variations on these two models and both we exported to such states as Ethiopia before 1939. In 1936 the elderly Fusil 1889 w updated by a series of modifications to produce the Fusil 36, and a version of this w produced for sniper use with a telescopic sight. During World War 1 a number Carabine 1889 weapons had been modified to produce the Carabine 1916, but th numbers involved appear to have been small – the Carabine 1916 was still in use 1940, as was the Fusil 1889, Fusil 36 and Carabine 1889. One further Belgian servi rifle was the Fusil 35, a design which owed more to the Mauser Modell 98 than th Modell 1889 – in fact it was almost identical to the Kar 98k.

After 1940 the Belgian rifles became part of the German armoury and were issue to troops occupying Belgium and other second-line units. Some, however, we captured in North Africa, and many were issued to Volksturm units in late 1944 an 1945. Listed below are the German designations.

Fusil 1889 *7.65 mm Gew 261(b)*
Fusil 36 *7.65 mm Gew 263(b)*
Carabine 1889 *7.65 mm Kar 451(b)*
Carabine 1916 *7.65 mm Kar 453(b)*

DATA (Fusil 36)
CALIBRE 7.65 mm 0.302 in
LENGTH 1096 mm 43.15 in
LENGTH OF BARREL 600 mm 23.6 in
WEIGHT 3.93 kg 8.66 lb
M.V. 725 m/s 2378 ft/sec
MAGAZINE CAPACITY 5 rounds

Belgian Bayonets.
No. 1 to No. 5 for Fusil
and Carabine Modell 1889.
No. 6 for Fusil 35 and 36



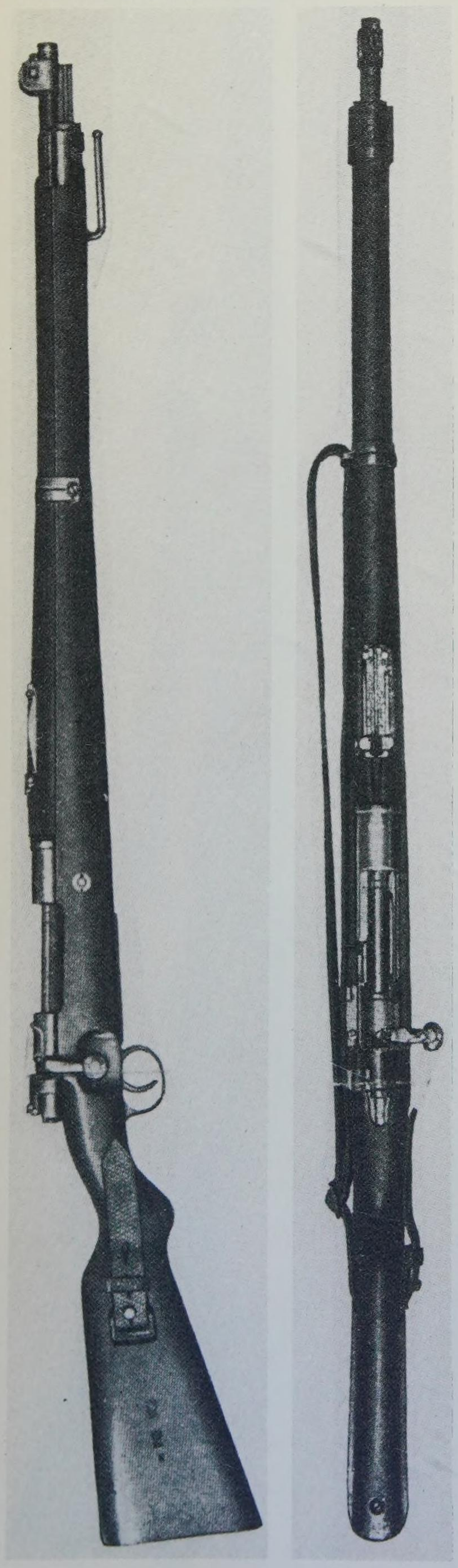
ian Fusil 36

7.92 mm Gewehr 98

Karabin 98

DATA (Gew 98)
CALIBRE 7.92 mm 0.312 in
LENGTH 1250 mm 49.2 in
LENGTH OF BARREL 740 mm 29.1 in
WEIGHT 4.2 kg 9.26 lb
M.V. 640 m/s 2100 ft/sec
MAGAZINE CAPACITY 5 rounds

7.92 mm Karabiner 98



7.92 mm Gewehr 98

The Mauser Model 1898 was one of the more important developments in the lon line of Mauser rifles that began with the Gewehr 88. The bolt action of the Gew 8 remained virtually unchanged on all Mauser rifles and the various Mauser model differed only in such things as length and furniture. With the Gew 98, most of th features of later models were already present – the sturdy bolt action, the five roun magazine, the well-made furniture, etc., but by 1939 very few were left in servi with the Wehrmacht. This was because of a modification programme begun in th 1920s which converted the Gew 98 into the Kar 98b (qv). But the Gew 98 was in u in Jugoslavia as the Puska 7 mm M 10 C, a 7 mm export model known as the Maus Modell 1910. The Jugoslavs also had numbers of original Gew 98 which they kne as the Puska 7.9 mm M98. Poland also built a direct copy of the Gew 98 as th Karabin 98 which differed from the original in minor respects. After 1939 and 19 these 'foreign' rifles came under German control and were redesignated as follow

Puska 7 mm M 10 C *Gew 221(j)*
Puska 7.9 mm M 98 *Gew 293(j)*
Karabin 98 *Gew 299(p) or Gew 98(p)*

Some of the Polish weapons were also captured and used by the Russians after 1939.

7.92 mm Karabiner 98a

After 1920 there was a re-organisation of the German rifle designations as a aftermath of the lessons learned during World War 1. One of the redesignate weapons was the Karabiner 98, a true carbine in that it was a cut-down rifle intende for use by cavalry. The Mauser bolt action was unchanged from that of the Gew 9 Relatively few were made, but a number were exported during the 1920s to Jug slavia where they were known as the Karabini 7.9 mm M 98, later to come bac under German control as the Kar 492(j). By 1939, very few of the original Kar 9 carbines were still in use with the German forces. However, the type was in service Poland as the Karabinek 1898 and, after 1939, many were returned to German u as the Kar 493(p) or Kar 98(p) and were issued to many second-line formations.

DATA
CALIBRE 7.92 mm 0.312 in
LENGTH 1100 mm 43.3 in
LENGTH OF BARREL 600 mm 23.6 in
WEIGHT 3.63 kg 8 lb
M.V. 870 m/s 2853 ft/sec
MAGAZINE CAPACITY 5 rounds

Polish Cavalry armed with Karabinek model 1898

7.92 mm Karabiner 98b

The Kar 98b was a modification of the Gew 98 carried out during the 1920s and was little more than a slight revision of the bolt handle, the sling swivels and the sights to accommodate new ammunition. In this form the Kar 98b was one of the more numerous German service rifles in 1939 and served on throughout the war. One item of note on this so-called carbine was that, even after modification, many retained their original Gew 98 markings.

DATA

CALIBRE 7.92 mm 0.312 in
LENGTH 1250 mm 49.2 in
LENGTH OF BARREL 740 mm 29.1 in

WEIGHT 4.01 kg 9 lb
M.V. 785 m/s 2574 ft/sec
MAGAZINE CAPACITY 5 rounds

Left: Polish Karabinek 1898
Right: 7.92 mm Karabiner 98b

7.92 mm Karabiner 98k

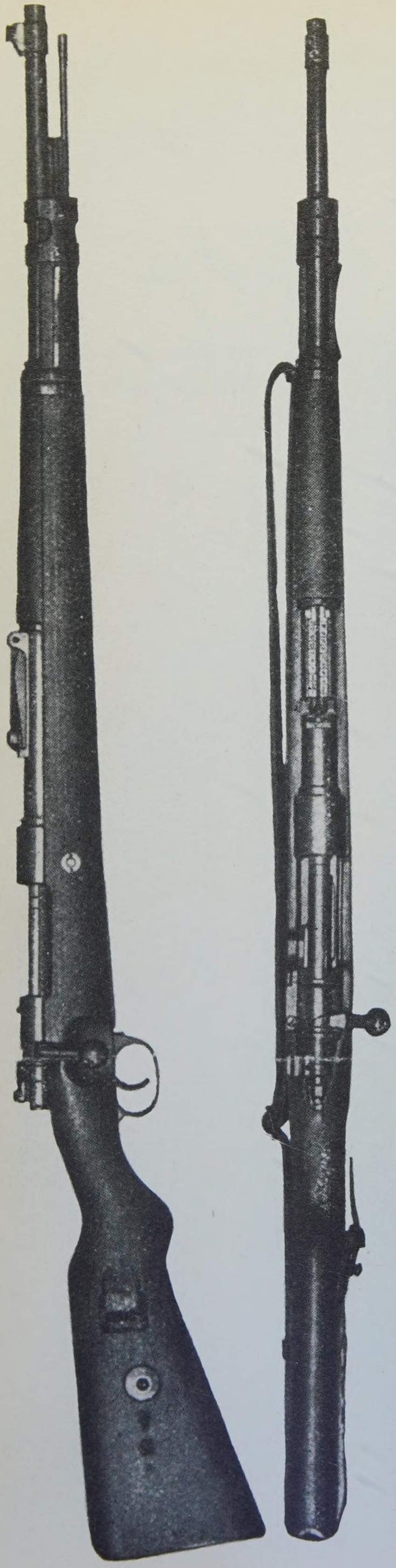
One of the lessons learned by the German Army during World War 1 was that a shorter rifle than the Gew 98 would be easier for the average soldier to use and handle. Thus by 1924 Mauser had developed a shorter rifle than the Gew 98, based on their commercial 'Standard' model. This new model was put into production in Belgium and elsewhere but it was not until 1935 that the new Kar 98k was put into production in Germany. (In this case the k stands for kurz, and refers to the weapon's length – it should not be confused with the kurz round). The Kar 98k was turned out in thousands until 1945, and many were also produced in Belgium and Czechoslovakia. As a result there were many minor variations in length and weights, and also in the furniture – for instance, late production models lacked the bayonet lug. In service the Kar 98k proved to be a good, sturdy and accurate service rifle, but the five-round magazine must have proved a disadvantage on many occasions. Several types of grenade launcher could be fitted and there were such accessories as a winter trigger.

Another rifle based on the 'Standard' model was almost identical to the Kar 98k. This was the Chinese Model Chiang Kai-shek or 'Generalissimo', first produced in 1935 in 7.92 mm. In this form the weapon was used extensively throughout the Far East.

A further variant on the Kar 98k was the Belgian Fusil 35, later to become the 7.65 mm Gew 262(b). This was in limited service with the Belgian Army in 1940.

DATA

CALIBRE 7.92 mm 0.312 in
LENGTH 1107.5 mm 43.6 in
LENGTH OF BARREL 739 mm 23.6 in
WEIGHT 3.9 kg 8.6 lb
M.V. 755 m/s 2476 ft/sec
MAGAZINE CAPACITY 5 rounds



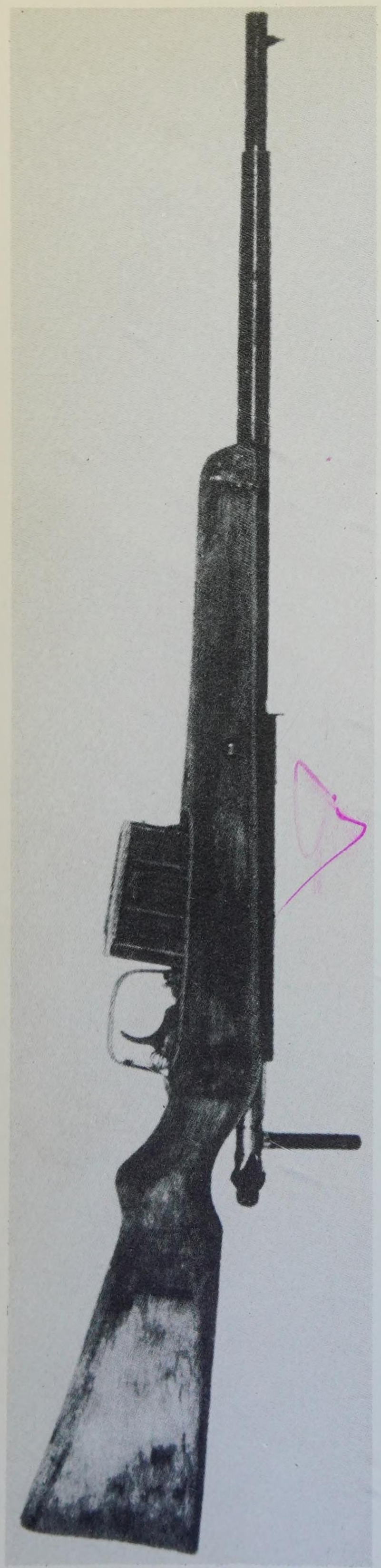
7.92 mm Karabiner 98k

Kar 98k, this was the primary German service rifle in WW2. Note Stick Grenade

German sniper with Kar 98k equipped with ZF.42

Bayonet 1884/98, Standard Issue

Kar 98k fitted with Telescopic Sight ZF.42



7.92 mm Volkssturmgewehr 1 (VG1)

7.92 mm Volkssturmgewehr 1

The VG 1 was very much a last-ditch affair and was produced during the last winte and spring of the war. At that time, the invasion of Germany itself was under way an to provide some form of home defence other than the Wehrmacht, the Volkstur was formed from civilian personnel. Most of the arms for this force came from stock of captured equipment but an alternative supply was needed. One result was th crude VG 1, a weapon made as simply and quickly as possible. The original desig came from Walther, and a Kar 43 magazine was used. The bolt was a very simp design which relied partly on the locked bolt handle to prevent the bolt flying bac when fired. The stock was very roughly finished, and the overall standards of safe and workmanship were very low. Some of these weapons were issued and used but would seem that they were as dangerous to the firer as they were to the target. Erm designed a very similar weapon that fired the 7.92 mm kurz round but this versio does not appear to have reached service.

The data quoted below is taken from a captured example and should not be take as applicable to all production versions.

DATA
CALIBRE 7.92 mm 0.312 in
LENGTH 1092 mm 43 in
LENGTH OF BARREL 589 mm 23.2 in
WEIGHT 3.77 kg 8.3 lb
M.V. 755 m/s 2476 ft/sec
MAGAZINE CAPACITY 10 rounds

7.92 mm Volkssturmkarabiner 98

Sometimes referred to as the VG 2, the VK 98 was another last-ditch weapon, th time based on Mauser components. In this case the VK 98 was produced by assem ling Mauser actions and barrels and using very roughly finished stocks. The barre came from elderly German and foreign rifles, but the bolt actions came from existi production lines and were thus not as crude as those used on the VG 1. No magaz was fitted. Some VK 98 rifles were issued to Volksturm units during the very days of the war but their usefulness must have been very limited, and captur examples proved unsafe to fire.

The data below is taken from a single captured example and should not be taken typical for all production examples.

DATA
CALIBRE 7.92 mm 0.312 in
LENGTH 1031 mm 40.6 in
LENGTH OF BARREL 528 mm 20. 8 in
WEIGHT 3.13 kg 6.9 lb
M.V. (approx) 731 m/s 2400 ft/sec
MAGAZINE CAPACITY single shot

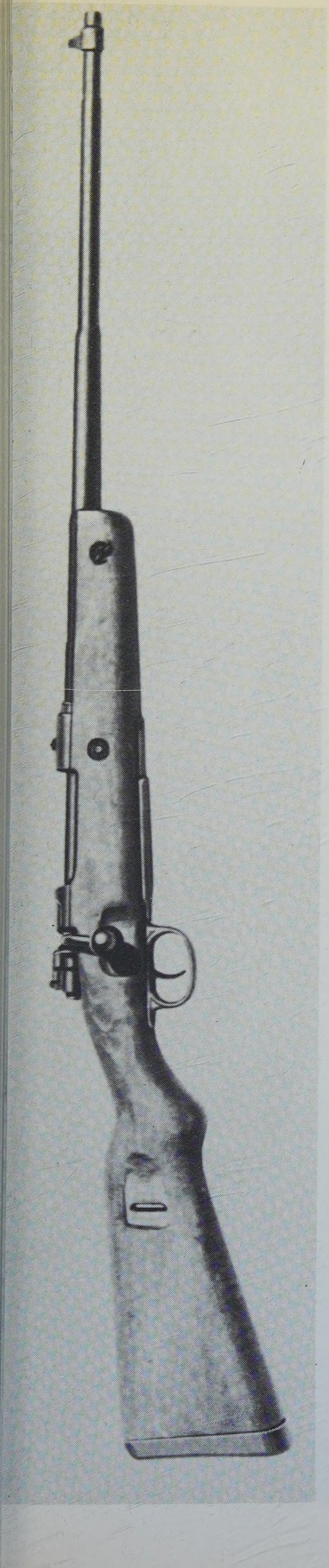
Opposite page

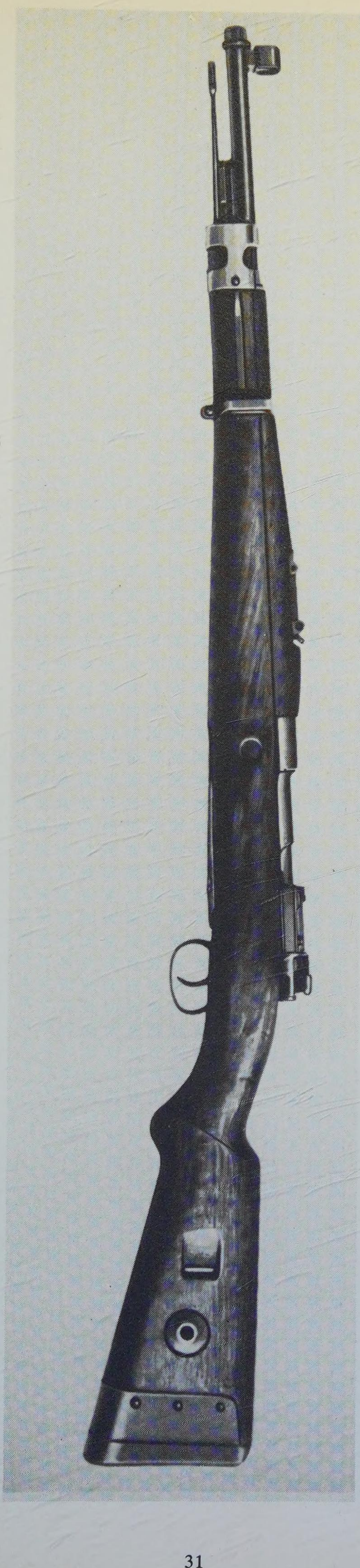
Left: 7.92 mm Volkssturmkarabiner 98 (V
Centre: 7.92 mm Gewehr 33/40
Right: Gewehr 33/40 with folding stock

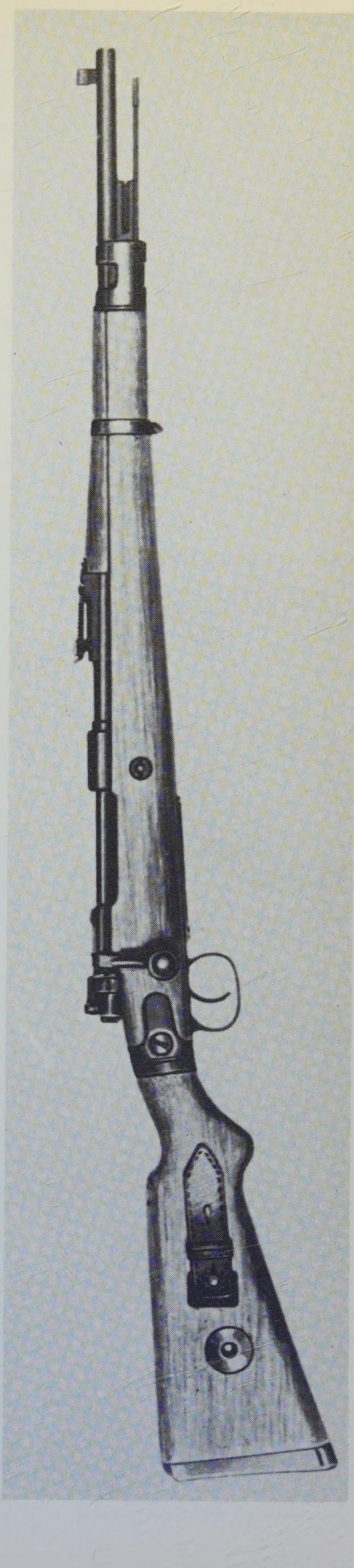
7.92 mm Gewehr 33/40

Although the Gew 33/40 used a conventional Mauser bolt action, it was not ori inally a German design. Its origins were Czech where it was known as the karabi vz.16/33 or vz.33. In this form it was a carbine version of the normal Mauser rifl issued to such units as engineers and mountain troops. After the German take-ov of Czechoslovakia in 1938 and 1939, the vz.33 was kept in production for th German Army and in late 1939 and early 1940 some production changes were ma to produce the Gew 33/40. Various changes were made to reduce weight and a met plate was added to the right of the butt for the use of mountain troops, who cou then use the carbine as an aid when climbing mountains. Most Gew 33/40s we issued to mountain units but the type was also used by the German Fallschirmjäg parachute and glider troops. For these units a special variant with a hinged stock reduce the length was developed but very few appear to have been made. Like m carbines using a normal-power round, the Gew 33/40 had a powerful recoil a produced a great deal of muzzle flash.

DATA
CALIBRE 7.92 mm 0.312 in
LENGTH 993 mm 39.1 in
LENGTH OF BARREL 490 mm 19.29 in
WEIGHT 3.58 kg 7.9 lb
M.V. 715 m/s 2346 ft/sec
MAGAZINE CAPACITY 5 rounds







German Troops with Gewehr 33/40

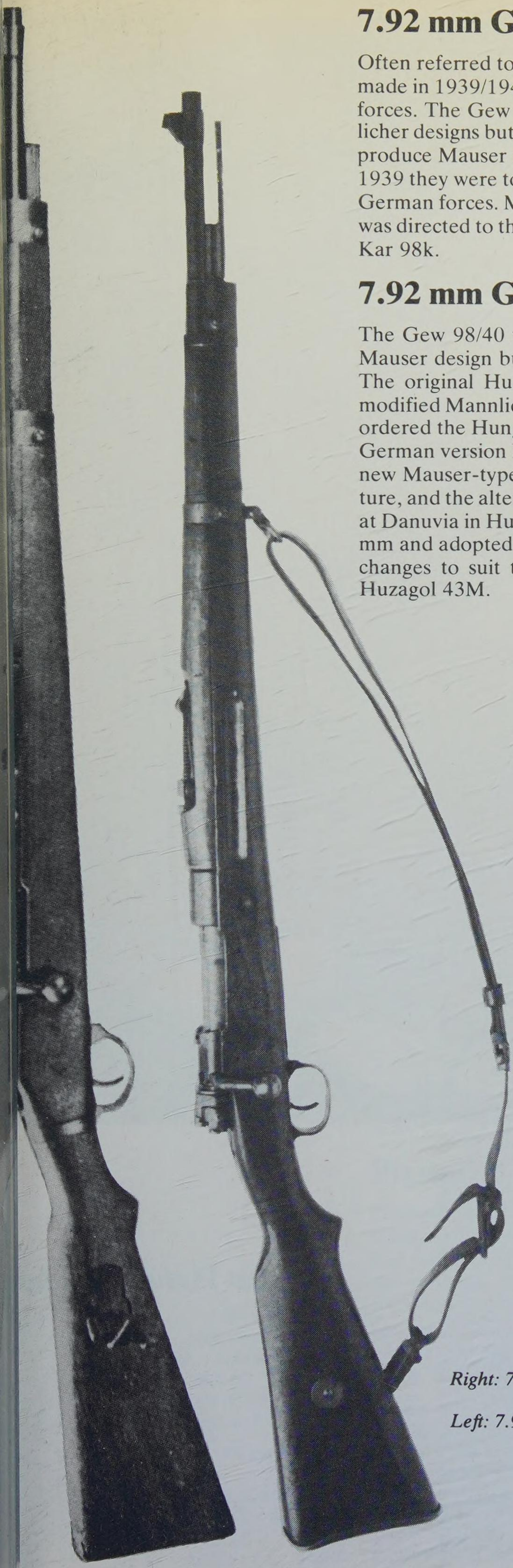
7.92 mm Gewehr 29/40

Often referred to as the Gew 29/40(ö), this rifle was another of the 'foreign' orders made in 1939/1940 in order to make up the numbers of rifles needed by the German forces. The Gew 29/40 was made by Steyr-Werke who normally produced Mannlicher designs but for many years they had an 'auxiliary' production line geared up to produce Mauser rifles. Their Modell 29 was almost identical to the Kar 98k and in 1939 they were told to go ahead and produce this model, with modifications, for the German forces. Most of the Steyr output, later renamed Osterreische Waffenfabrik, was directed to the Luftwaffe. Data for the Gew 29/40 is virtually the same as for the Kar 98k.

7.92 mm Gewehr 98/40

The Gew 98/40 was something of an oddity among German rifles as it was not a Mauser design but used a Mannlicher bolt action, and its origins were Hungarian. The original Hungarian rifle was the 8 mm Huzagol 35M which used a slightly modified Mannlicher bolt. In 1940 the German Army was so short of rifles that they ordered the Hungarian rifle for their own use. Some changes had to be made as the German version had to fire the standard German 7.92 mm Modell 98 round, and a new Mauser-type magazine was fitted. Changes were made to the stock and furniture, and the altered design became the Gew 98/40. Production was carried out only at Danuvia in Hungary, and in 1943 Hungary changed their standard calibre to 7.92 mm and adopted the Gew 98/40 as their own service rifle. They incorporated some changes to suit their own tastes and the Gew 98/40 then became the 7.92 mm Huzagol 43M.

DATA (Gew 98/40)
CALIBRE 7.92 mm 0.312 in
LENGTH 1107.5 mm 43.6 in
LENGTH OF BARREL 739 mm 23.6 in
WEIGHT 4.04 kg 8.9 lb
M.V. 755 m/s 2476 ft/sec
MAGAZINE CAPACITY 5 rounds

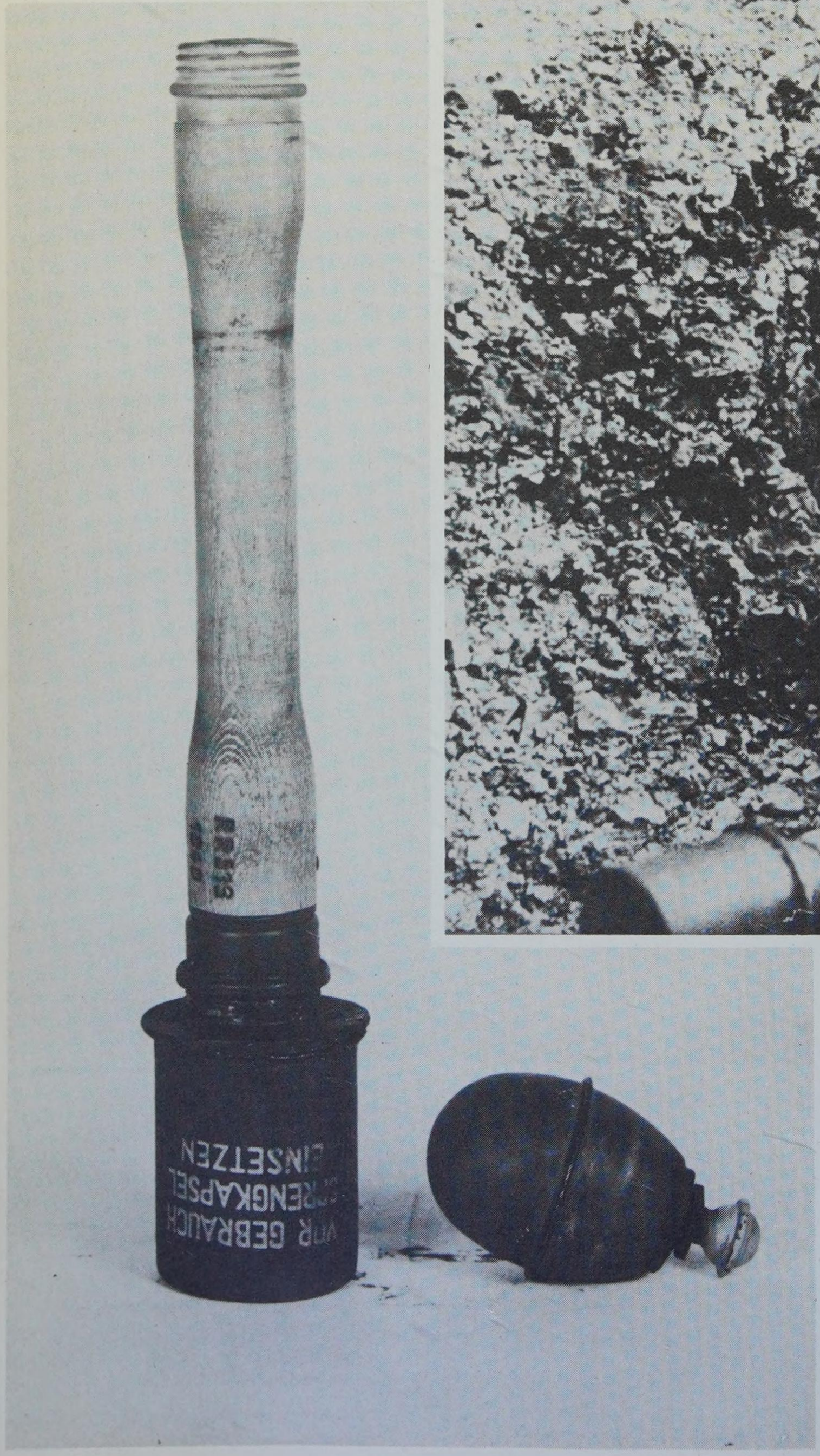


Right: 7.92 mm Gewehr 29/40

Left: 7.92 mm Gewehr 98/40

German soldier pulling string to fuze Stick Grenade.

Stielgranate 24 and Eirgranate 39



German Hand Grenades

Stielgranate 24
Offensive/defensive
LENGTH OVERALL 356 mm 14 in
DIAMETER 70 mm 2.75 in
WEIGHT 0.596 kg 1.31 lb
DELAY 4.5 seconds

Eiergranate 39
Defensive
LENGTH OVERALL 76.2 mm 3 in
DIAMETER 51 mm 2 in
WEIGHT 0.34 kg 0.75 lb
DELAY 4.5 seconds

Grenade being thrown

1978447

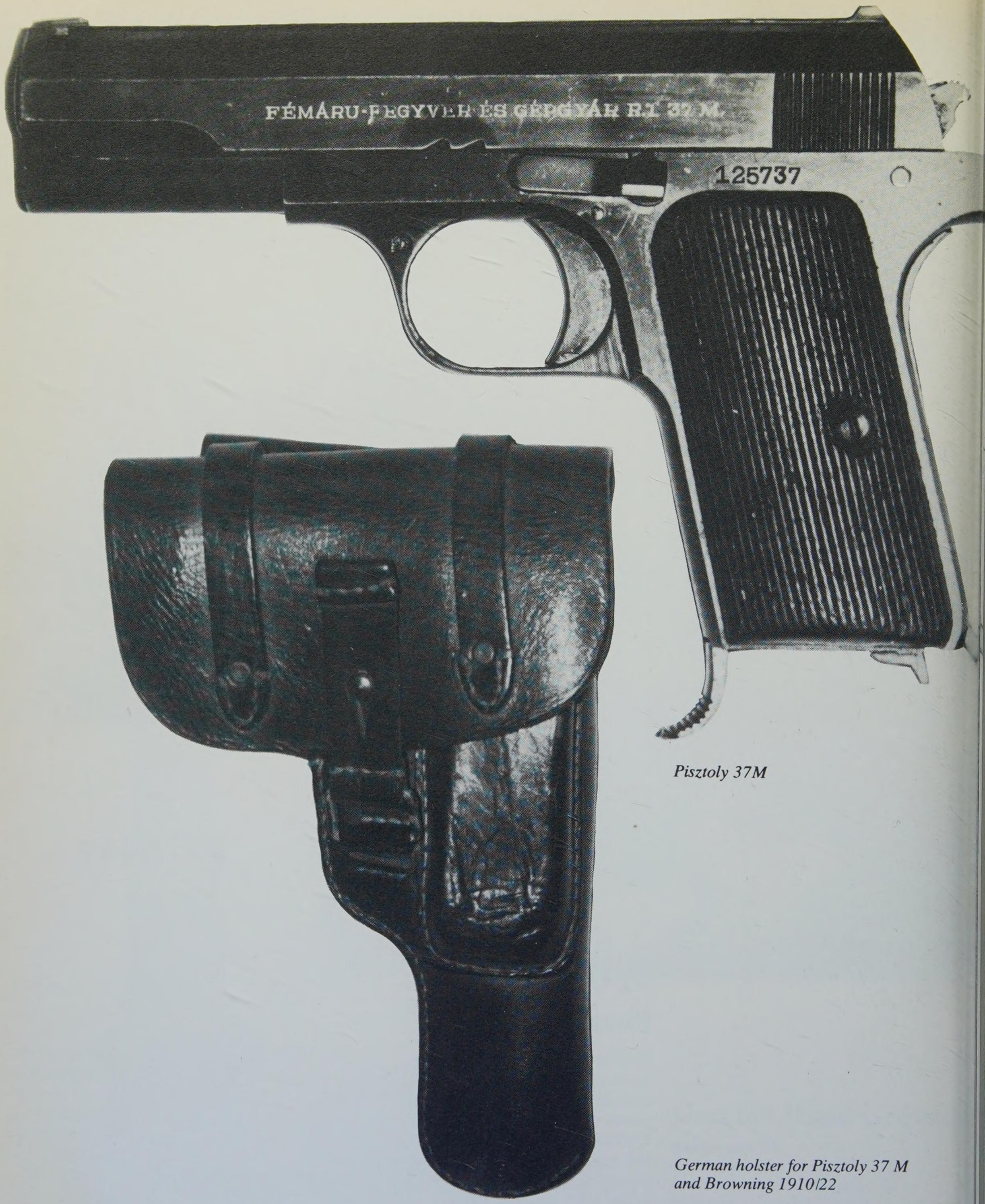
HUNGARY

Pisztoly 37M

Produced by Femaru-Fegyver es Gepgyar, Budapest, the Pisztoly 37M was a revised version of their earlier Pisztoly 29M. Both were variations on the Browning theme and differed mechanically only in details. The 37M was selected as the standard pistol of the Hungarian Army in 1937. These weapons were calibered for the 7.65 mm cartridge, but some were produced chambered for 9 mm short rounds. During World War 2, production was carried out for the Wehrmacht. These pistols had some slight modifications such as the addition of a thumb safety, and were known as the 7.65 mm P 37(ü).

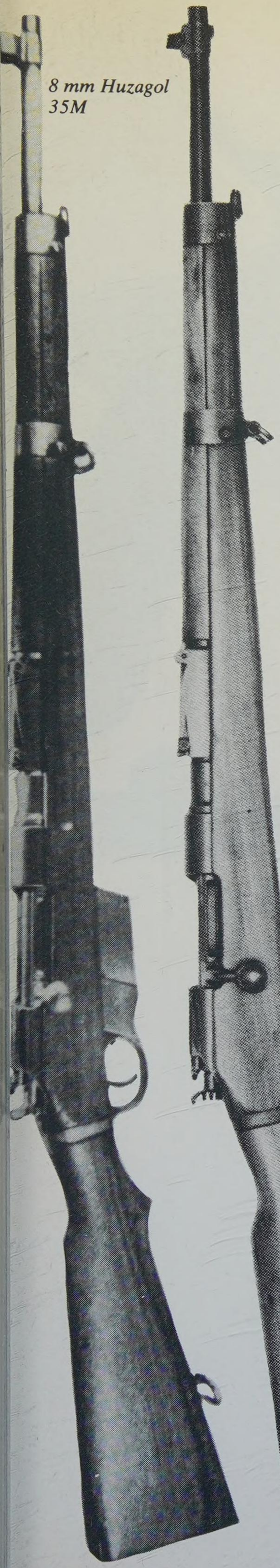
DATA

CALIBRE 7.65 or 9 mm 0.301 or 0.354 in
LENGTH 182 mm 7.17 in
LENGTH OF BARREL 110 mm 4.33 in
WEIGHT 0.77 kg 1.69 lb
M.V. (9 mm) 300 m/s 984 ft/sec
M.V. (7.65 mm) 280 m/s 920 ft/sec
MAGAZINE CAPACITY 7 rounds



Pisztoly 37M

German holster for Pisztoly 37 M and Browning 1910/22



8 mm Huzagol 35M

8 mm Huzagol 35M

During the 1930s the Hungarian Army decided to replace their old Huzagol 31M rifles, a design based on the 1895 Mannlicher, and selected a slightly modified Mannlicher bolt action fitted to a barrel slightly longer than the old 31M. The result was the 8 mm Huzagol 35M, and it was the last rifle using a Mannlicher action to be selected as a service weapon. Deliveries to the Hungarian Army were in full spate in 1939 and in 1940 the German forces ordered a version in 7.92 mm and some other changes that was to be known as the 7.92 mm Gew 98/40 (qv).

DATA

CALIBRE 8 mm 0.315 in
LENGTH 1110 mm 43.75 in
LENGTH OF BARREL 600 mm 23.6 in
WEIGHT 4.04 kg 8.875 lb
M.V. 730 m/s 2400 ft/sec
MAGAZINE CAPACITY 5 rounds

7.92 mm Huzagol 43M

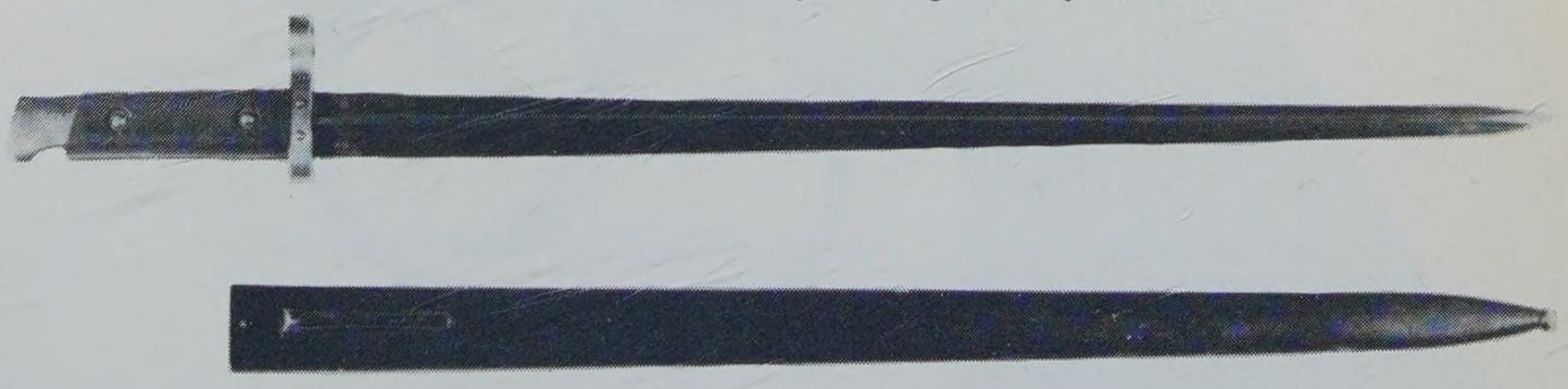
During the course of World War 2, the Hungarian Army decided to adopt a more modern cartridge than the 8 × 56 mm 31M, and decided upon the standard German 7.92 mm round. This decision was no doubt influenced by their experiences with the 7.92 mm Gew 98/40 which they were manufacturing for the Germans and they adopted this rifle as their standard service weapon to fire the 7.92 mm round. They made some changes to the stock, swivels and furniture to suit their own tastes and the result was the Huzagol 43M. The weapon was not produced in sufficient quantities to fully re-equip the Hungarian units before the war ended, but many that were made did see some form of action before Hungary was overrun by the Russians in late 1944 and early 1945.

DATA

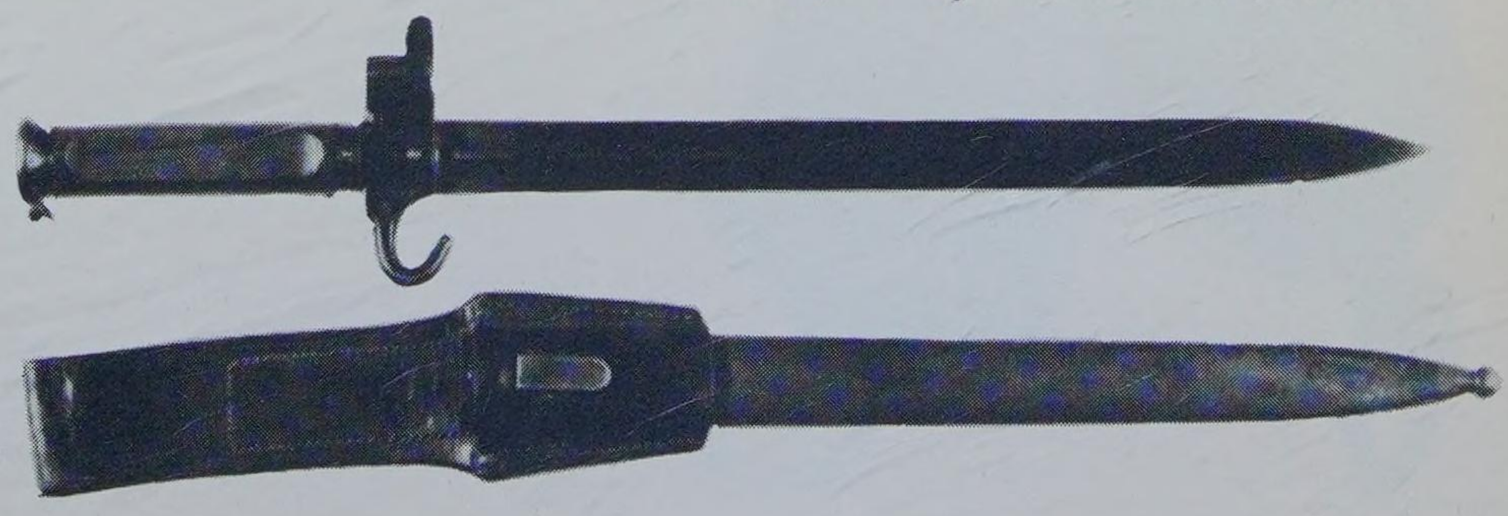
CALIBRE 7.92 mm 0.312 in
LENGTH 1092 mm 43 in
LENGTH OF BARREL 604 mm 23.8 in
WEIGHT 4.04 kg 8.875 lb
M.V. 756 m/s 2480 ft/sec
MAGAZINE CAPACITY 5 rounds

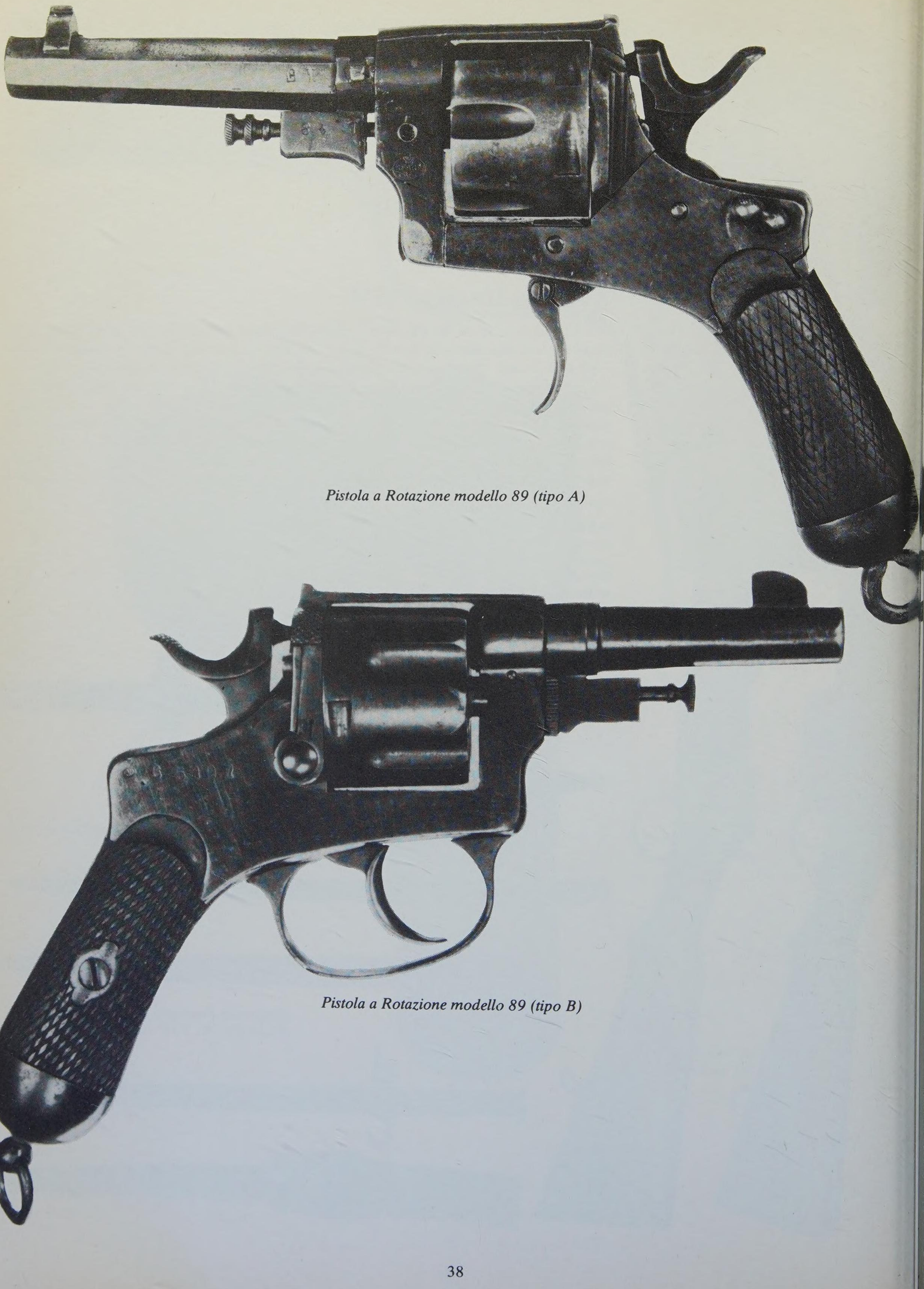
7.92 mm Huzagol 43M

Bayonet for Hungarian rifles, Models 1935 and 1943



Hungarian Bayonets: No. 1 for Mannlicher Model 95; No. 2 for Models 1935 and 1943





Pistola a Rotazione modello 89 (tipo A)

Pistola a Rotazione modello 89 (tipo B)

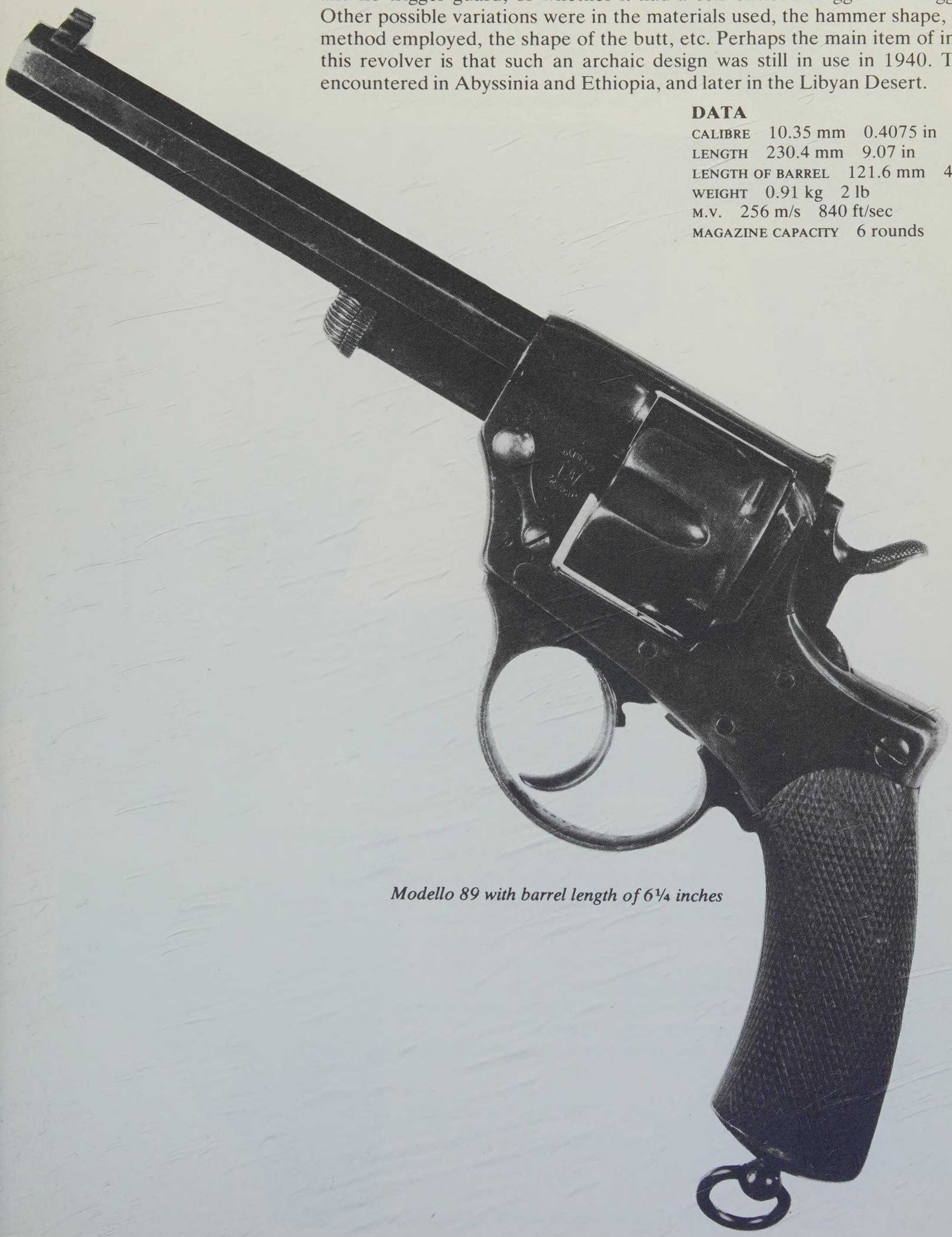
ITALY

Pistola a Rotazione modello 89

The modello 89 revolver must have been one of the most elderly pistol designs still in use in 1940 for it was based on a design issued for service in 1872. As the modello 89 remained in production until the 1920s, and there was no centralised manufacturing base (Glisenti did however make the largest numbers), it is not surprising that there were many variations on the basic design. One source states that over sixty variations could be counted, but the main variation was whether the pistol had a folding trigger and no trigger guard, or whether it had a conventional trigger and trigger guard. Other possible variations were in the materials used, the hammer shape, the safety method employed, the shape of the butt, etc. Perhaps the main item of interest for this revolver is that such an archaic design was still in use in 1940. They were encountered in Abyssinia and Ethiopia, and later in the Libyan Desert.

DATA

CALIBRE 10.35 mm 0.4075 in
LENGTH 230.4 mm 9.07 in
LENGTH OF BARREL 121.6 mm 4.787 in
WEIGHT 0.91 kg 2 lb
M.V. 256 m/s 840 ft/sec
MAGAZINE CAPACITY 6 rounds



Modello 89 with barrel length of 6¼ inches

Pistola Automatica Glisenti modello 1910

Introduced into service in 1910, the modello 10 was based on a 1905 design by two Swiss engineers. Most of the modello 10 pistols were made by Societa Siderugica Glisenti at Turin. The operation of the modello 10 was a blow-back but the cartridge is far less powerful than the normal 9 mm Parabellum round – although it was virtually identical in size and appearance. In service the modello 10 was found to be prone to a number of minor failings but was kept in use until World War 2.

DATA
CALIBRE 9 mm 0.354 in
LENGTH 211.2 mm 8.315 in
LENGTH OF BARREL 95 mm 3.74 in
WEIGHT 0.8 kg 1.76 lb
M.V. 258 m/s 846 ft/sec
MAGAZINE CAPACITY 7 rounds

Pistola Automatica Glisenti modello 1910

Holster for Pistola modello 1910

Pistola Automatica Beretta modello 1934

The first Beretta automatic pistol was the modello 1915 produced for military use during World War 1. This was followed by the modello 1922 in 7.65 mm, and the modello 1923 chambered for the 9 mm Glisenti round. The modello 1931 was chambered for the 7.65 mm round and many of these were issued to the Italian Navy. Then came the modello 1934 or 34, and this pistol became the 'standard' Italian Army pistol of World War 2. The modello 34 was usually produced in 9 mm calibre, but the round used was the 9 mm short, and a few 7.65 mm versions were produced. The finish of the modello 34 was always first class and as a result the modello 34 became one of the most prized of war trophies by the Allies. The Germans also thought highly of the modello 34 and impressed as many as possible as the 9 mm *P 671(i)*. Operation of the modello 34 was simple blow-back, and it used an external hammer. Production was by Pietro Beretta SpA at Gardone.

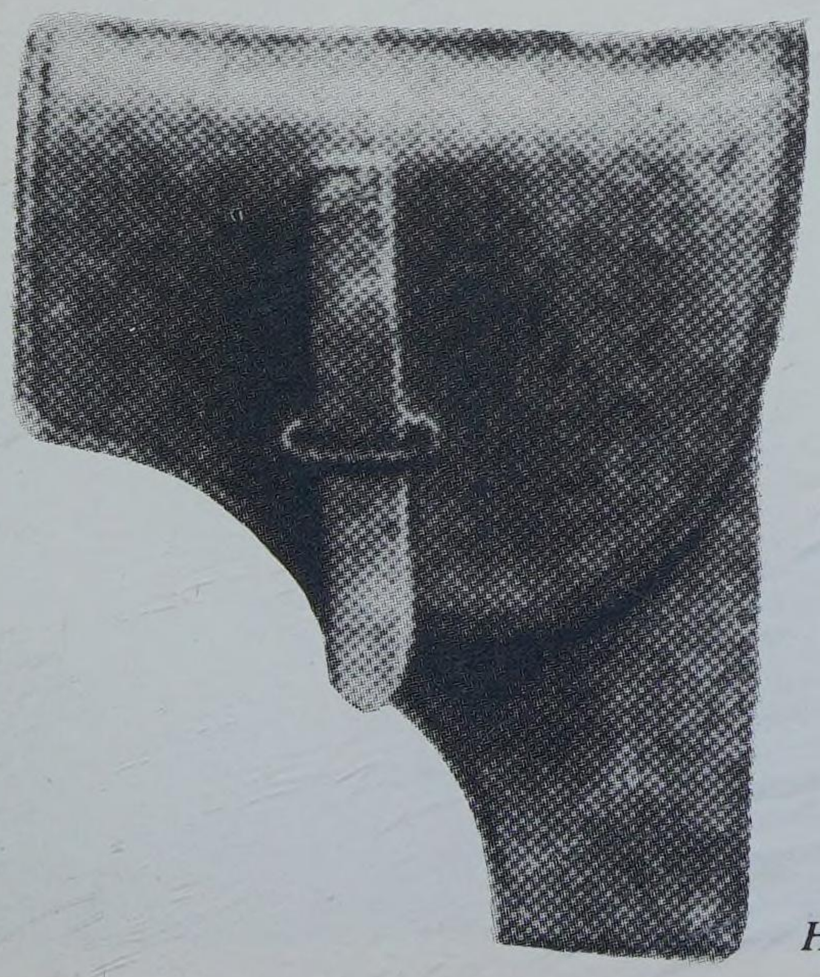
A smaller, lighter version was built in 7.65 mm as the modello 35 and these were issued to the Italian Air Force.

DATA
CALIBRE 9 mm 0.354 in
LENGTH 152 mm 6 in
LENGTH OF BARREL 86.5 mm 3.4 in
WEIGHT 0.617 kg 1.36 lb
M.V. 245 m/s 830 ft/sec
MAGAZINE CAPACITY 7 rounds

Pistola Automatica Beretta modello 1915

Pistola Automatica Beretta modello 1934

Pistola Automatica Beretta modello 1923



Holster for Beretta Pistola modello 1934

1. *6.5 mm Fucile modello 91*

2. *6.5 mm Moschetto modello, per truppe speciali (Mod 91.T*

3. *6.5 mm Moschetto modello 91, per cavalleria*

4. *6.5 mm Moschetto modello 91/24*

6.5 mm Fucile modello 91

The modello 91 was the first of the Mannlicher-Carcano rifles to be accepted for service with the Italian Army in 1892. The Mannlicher-Carcano system was based on the bolt action of the Mauser Modell 1889 with the addition of the Carcano bolt-sleeve safety mechanism, and the Mannlicher clip-loading magazine was retained. The name of Parravicino is often linked with this rifle – he was the general presiding over the commission that introduced the modello 91. The modello 91 was the standard Italian Army rifle during World War 1 and was still in use in 1940 in very large numbers. The Germans took over some numbers in 1943 to arm some of their units in Italy, and these then became the Gew 214(i). During 1944 some of these were rebored to 7.92 mm but the numbers appear to have been small.

Another user nation of the modello 91 was Jugoslavia. There the modello 91 was known as the Puska 6.5 mm M 91(i), later to become the Gew 214(j).

Japan also had small numbers of a variant of the modello 91 chambered for the Japanese 6.5 mm cartridge. These were bought from Italy in 1905 and small numbers were captured in various parts of the Pacific theatre between 1942 and 1945.

DATA

CALIBRE 6.5 mm 0.256 in
LENGTH 1285 mm 50.59 in
LENGTH OF BARREL 780 mm 30.7 in
WEIGHT 3.8 kg 8.4 lb
M.V. 630 m/sec 2067 ft/sec
MAGAZINE CAPACITY 6 rounds

an Artillery Gunners
ed with the Moschetto 91

Above: Italian Naval Infantry armed with 6.5 mm modello 91 TS

Below: Italian troops in action in N. Africa, armed with 6.5 mm Fucile modello 91

Fucile modello 38

The Fucile modello 38 was the first of the Italian rifles built to take the new 7.35 mm cartridge. It was put into production in 1938 and was basically much the same rifle as the Fucile modello 91 but revised sights were fitted. Almost as soon as the new rifles went into production, it was seen that war was imminent and in view of the large stocks of 6.5 mm ammunition still held, it was decided to revert to the 6.5 mm calibre. As a result the modello 38 was then produced in 6.5 mm calibre and many existing 7.35 mm rifles were rebarrelled with 6.5 mm barrels. Not surprisingly the result was a logistic confusion for the Italian Army which never resolved itself before the Italian surrender in 1943. The Germans then took over the situation and the 6.5 mm rifles became the Gew 209(i) and the surviving 7.35 mm rifles became the Gew 231(i). They tried to solve the logistics problem by simply reboring the two rifles to take their own 7.92 mm ammunition but few seem to have been so converted and the result was a rather unsafe weapon.

DATA

CALIBRE 6.5 and 7.35 mm 0.256 and 0.289 in
LENGTH 1020 mm 40.2 in
LENGTH OF BARREL 536 mm 21.1 in
WEIGHT (6.5 mm) 3.45 kg 7.6 lb
WEIGHT (7.35 mm) 3.4 kg 7.5 lb
M.V. (6.5 mm) 707 m/s 2320 ft/sec
M.V. (7.35 mm) 756 m/s 2482 ft/sec
MAGAZINE CAPACITY 6 rounds

Italian troops with Moschetto modello 38, per cavalleria .

1. *Fucile modello 38*
2. *Moschetto modello 38, per truppe speciali (Mod 38 TS)*
3. *Moschetto modello 38, per cavalleria*

1. *Fucile modello 41*

2. *Moschetto modello 41, per truppe speciali (Mod 41 TS)*

3. *Moschetto modello 41, per cavalleria*

4. *Moschetto-Balilla*

Fucile modello 41

The modello 41 was a revised version of the modello 91 produced as a war-time measure in 1941. It differed from the modello 91 only in length and the sights, and the calibre remained the old 6.5 mm. In 1943 the Germans took over the type as the Gew 240(i) and rebored some to 7.92 mm.

DATA
CALIBRE 6.5 mm 0.256 in
LENGTH 1170 mm 46.1 in
LENGTH OF BARREL 690 mm 27.2 in
WEIGHT 3.72 kg 8.21 lb
M.V. (approx) 719 m/s 2360 ft/sec
MAGAZINE CAPACITY 6 rounds

Mannlicher-Carcano Carbines

MOSCHETTO MODELLO 91, PER CAVALLERIA. This was similar to the Model 1891 Fucile except that the bolt handle was turned down to make it easier to carry in a saddle holster. The gun was half-stocked with a barrel length of 17.75 in. The outstanding feature of this weapon was the bayonet which was permanently attached on a hinged pin to the nose cap below the muzzle. This bayonet folded back below the barrel when not in use. When sprung out for use, it was locked by a spring catch. This design was intended for thrusting from the saddle.

MOSCHETTO MODELLO 91, PER TRUPPE SPECIALI (MOD 91TS) This was for issue to truppe speciali (special troops), that is gunners and specialists.

MOSCHETTO MODELLO 91/24. This was provided with sling swivel and designed for mountain troops and artillery use. It was a cut down version of the Fucile 91 converted in 1924. Used by Jugoslavia as the Karabin 6.5 mm M 91 i.

MOSCHETTO MODELLO 38, PER CAVALLERIA. This version was produced in 7.35 mm (0.289 in) calibre. A modello 38 TS was also produced.

MOSCHETTO MODELLO 41, PER CAVALLERIA. This and the modello 4[illegible] were the series modello 38 converted back to 6.5 mm cartridge.

MOSCHETTO BALILLA. This was a 6.5 mm carbine specially produced for youth organisations. It was a light, cut-down carbine with folding bayonet. Special blank cartridges were used.

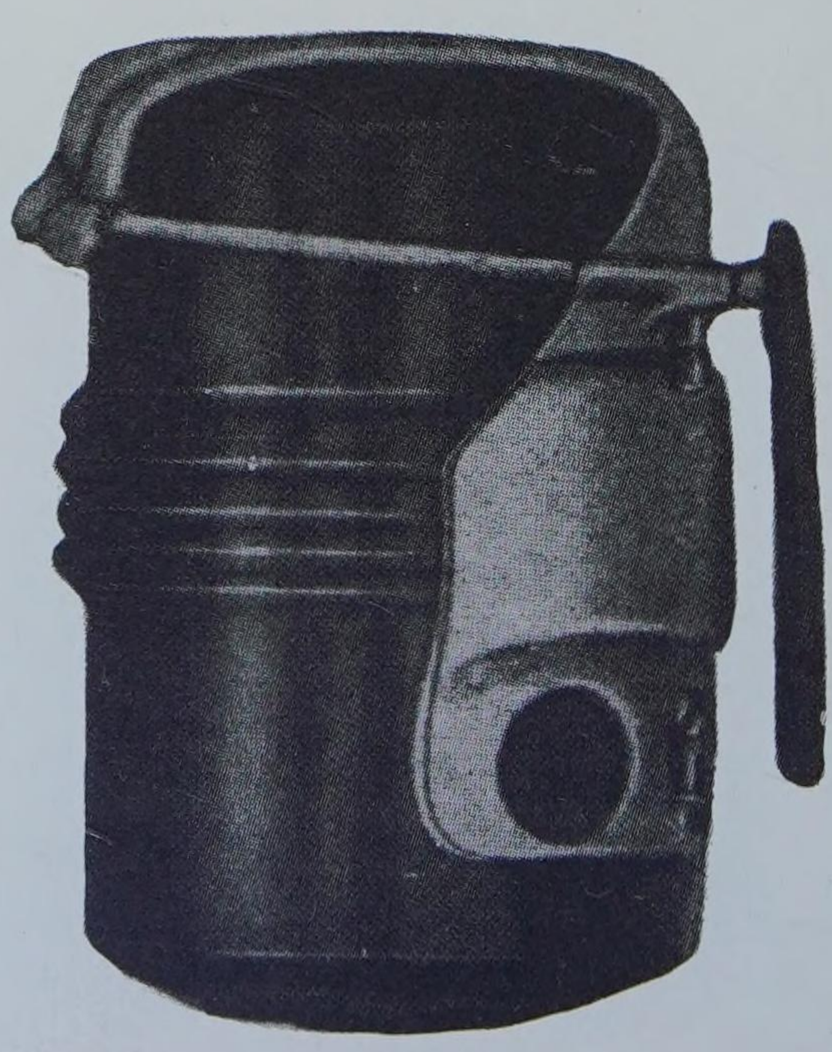
All the above carbines were still in use in 1940 and, in 1943, many were taken into use by the Germans who later converted many of them to 7.92 mm. A check list of German designations follows:

Moschetto modello 91 *Kar 409(i)*
Moschetto modello 91 TS *Kar 410(i)*
Moschetto modello 91/24 *Kar 416(i)*
Moschetto modello 38 *Kar 430(i)*

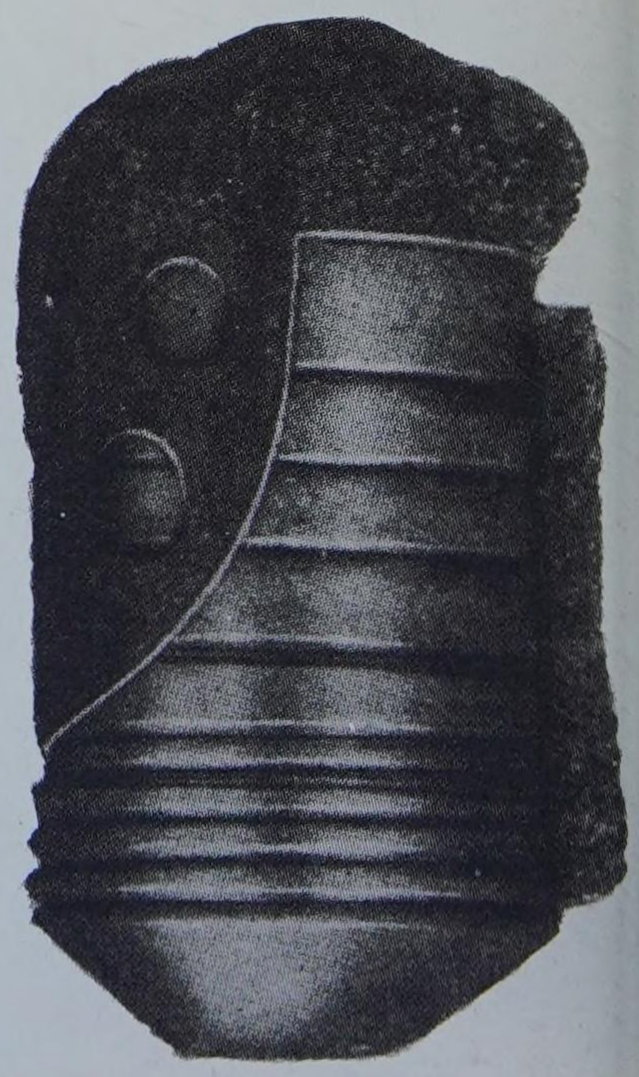
DATA (modello 38)
CALIBRE 6.5 and 7.35 mm 0.256 and 0.289 in
LENGTH 919 mm 36.2 in
LENGTH OF BARREL 450 mm 17.7 in
WEIGHT (6.5 mm) 3.26 kg 7.18 lb
WEIGHT (7.35 mm) 3.23 kg 7.12 lb
M.V. (6.5 mm) 700 m/s 2297 ft/sec
M.V. (7.35 mm) 731 m/s 2400 ft/sec
MAGAZINE CAPACITY 6 rounds

Bomba a mano O.T.O. modello 35

Bomba a mano S.R.C. modello 35



Bomba a mano Breda modello [illegible]



Italian Hand Grenades

All these hand grenades used an 'all ways' impact fuze

Bomba a mano O.T.O. modello 35
Offensive
LENGTH OVERALL 75 mm 2.95 in
DIAMETER 50 mm 1.97 in
WEIGHT 0.15 kg 0.33 lb

Bomba a mano S.R.C. modello 35
Offensive/defensive
LENGTH OVERALL 80 mm 3.15 in
DIAMETER 64 mm 2.52 in
WEIGHT 0.2 kg 0.441 lb

Bomba a mano Breda modello 35
Offensive/defensive
LENGTH OVERALL 96 mm 3.78 in
DIAMETER 58 mm 2.28 in
WEIGHT 0.2 kg 0.441 lb

lian soldiers throwing German
ck Grenades, soldier
front holds a O.T.O. grenade

JAPAN

9 mm Pistol Revolver Type 26

The Type 26 revolver was first issued in 1893 for cavalry use. Its design was an amalgam of various American and European designs and was unusual in having a double-action-only trigger mechanism. Another oddity was that it had its own peculiar ammunition that was not used by any other weapon. The Type 26 was replaced as a service 'standard' pistol after 1914 but large numbers were still in use after 1941. Official Japanese designation was Meiji 26 Nen Kenju.

DATA

CALIBRE 9 mm 0.354 in
LENGTH 239 mm 9.4 in
LENGTH OF BARREL 119 mm 4.7 in
WEIGHT (approx) 0.9 kg 2 lb
M.V. 277 m/s 745 ft/sec
CYLINDER CAPACITY 6 rounds

9 mm Pistol, Revolver Type 26

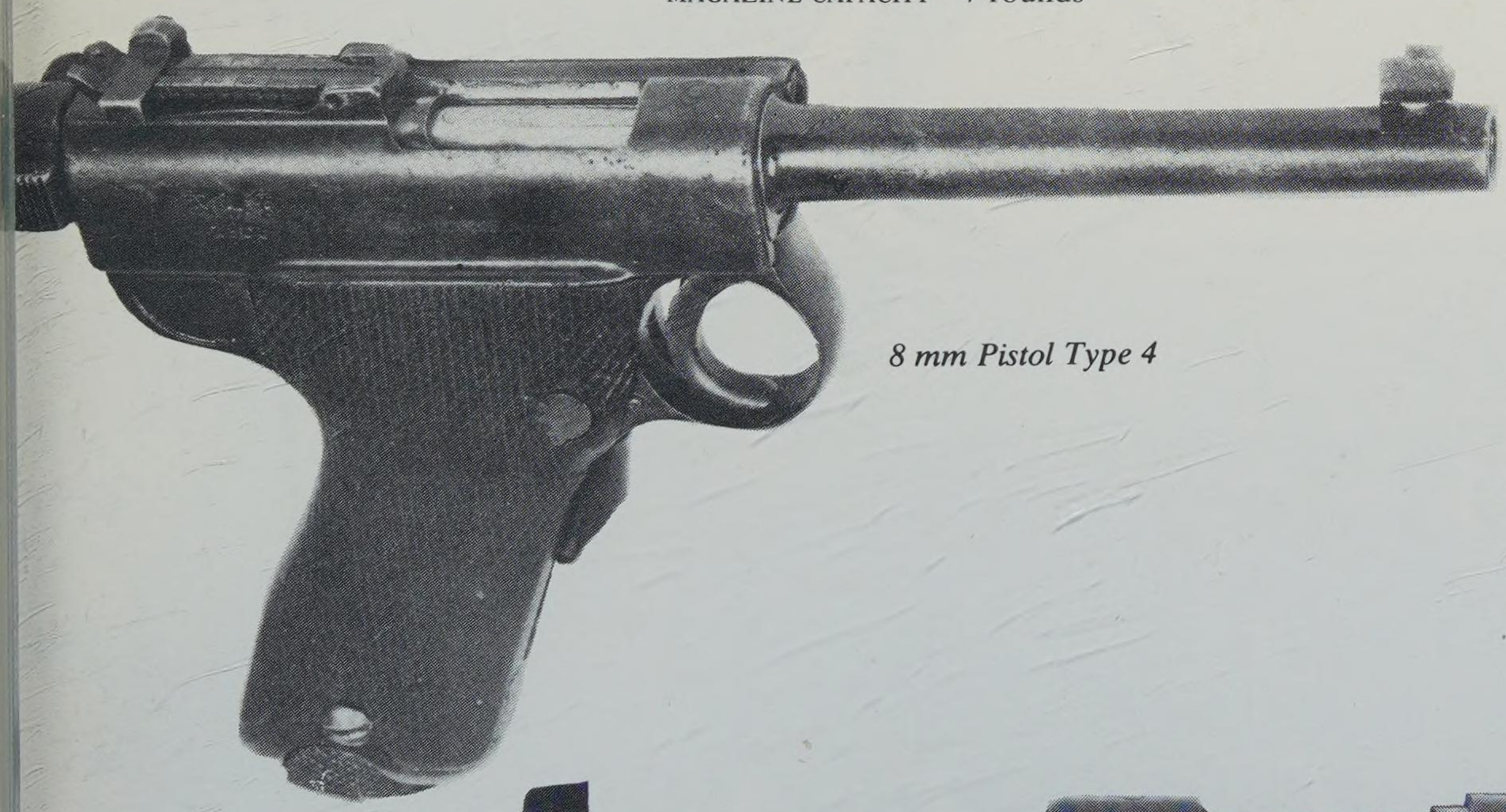
Holster for Pistol Type 26

8 mm Pistol Type 4

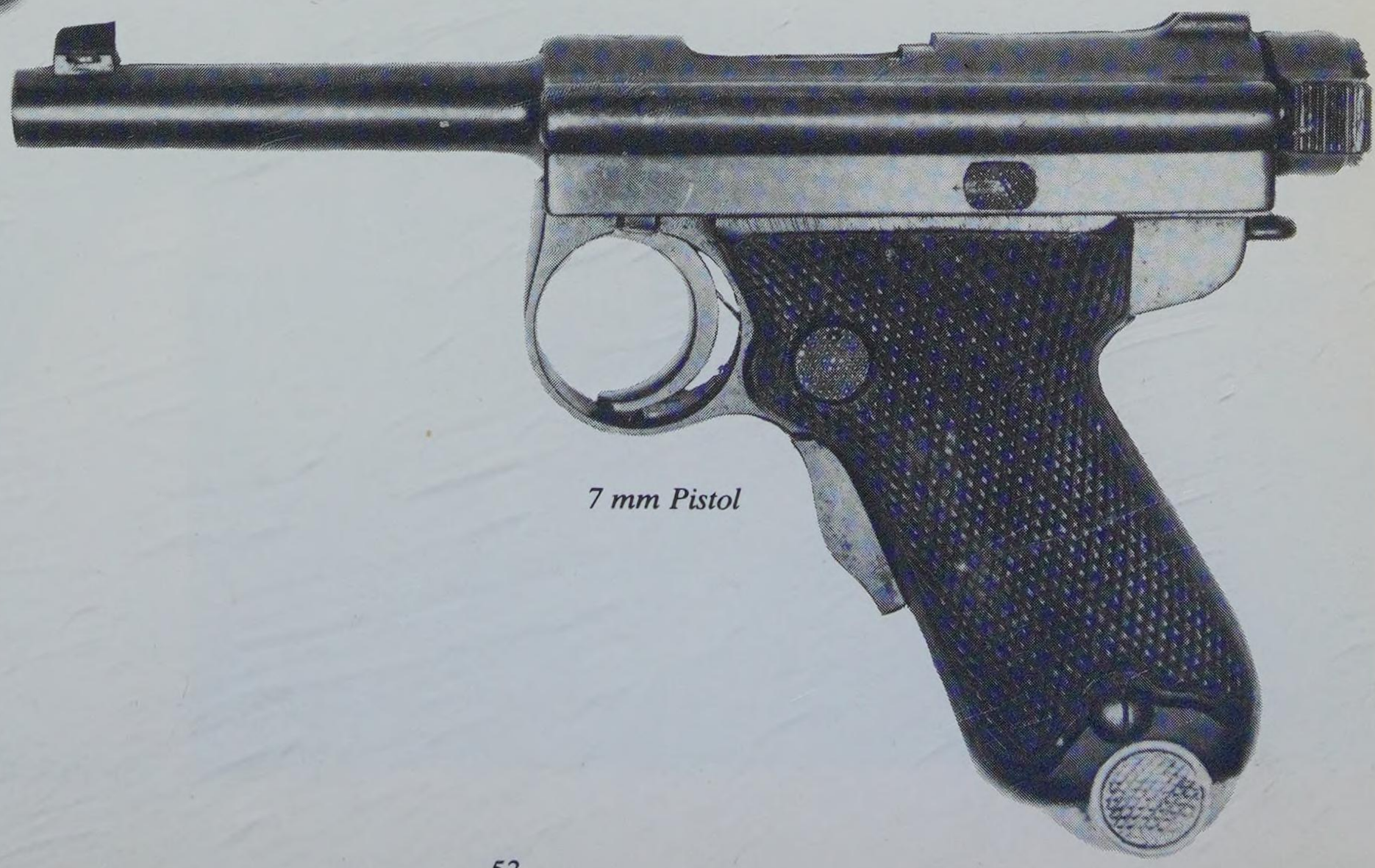
Although the Type 4 pistol was never adopted as a general service weapon, it was in use during World War 2. It was designed by Colonel Kijiro Nambu and first offered in 1909. The designer's name stuck to his design so closely that during World War 2, most Japanese pistols were collectively referred to as 'Nambus'. The Type 4 was made by the Kayoba Factory Co. Ltd, and they turned out large numbers, not only for service use but also for export to China and other parts of Asia. It would seem that the basic design owed much to that of the Italian Glisenti pistol, but the Type 4 mechanism was unique and rather involved. An almost identical mechanism was used on a 7 mm version of this pistol, known to the Allies as the 'Baby Nambu' which was produced as a staff officers' weapon in 7 mm. Japanese designation for the 8 mm version was Pistolu Nambu Taisho 4 Nen.

DATA (8 mm Type 4)
CALIBRE 8 mm 0.315 in
LENGTH 229 mm 9 in
LENGTH OF BARREL 120 mm 4.7 in
WEIGHT 0.9 kg 1.94 lb
M.V. 325 m/s 1065 ft/sec
MAGAZINE CAPACITY 3 rounds

DATA (7 mm 'Baby Nambu')
CALIBRE 7 mm 0.276 in
LENGTH 171 mm 6.75 in
LENGTH OF BARREL 83 mm 3.25 in
WEIGHT 0.681 kg 1.5 lb
M.V. 305 m/s 100 ft/sec
MAGAZINE CAPACITY 7 rounds



8 mm Pistol Type 4



7 mm Pistol

8 mm Pistol Type 14

The Type 14 pistol was the 'service' version of the Type 4 in that it was officiall adopted for service use and differed from the commercial variant in many respect The grip safety of the Type 4 was altered to a normal safety catch, and the mechanis was modified slightly. Outwardly the appearance was altered and the design gene ally strengthened for service use. Unfortunately, the basic design was not a good on and, in use, the Type 14 was prone to many failures and malfunctions. After 1938 modified version with an enlarged 'winter' trigger guard was introduced.

DATA

CALIBRE 8 mm 0.315 in
LENGTH 229 mm 9 in
LENGTH OF BARREL 121 mm 4.75 in
WEIGHT 0.91 kg 2 lb
M.V. 325 m/s 1065 ft/sec
MAGAZINE CAPACITY 8 rounds

8 mm Pistol Type 14

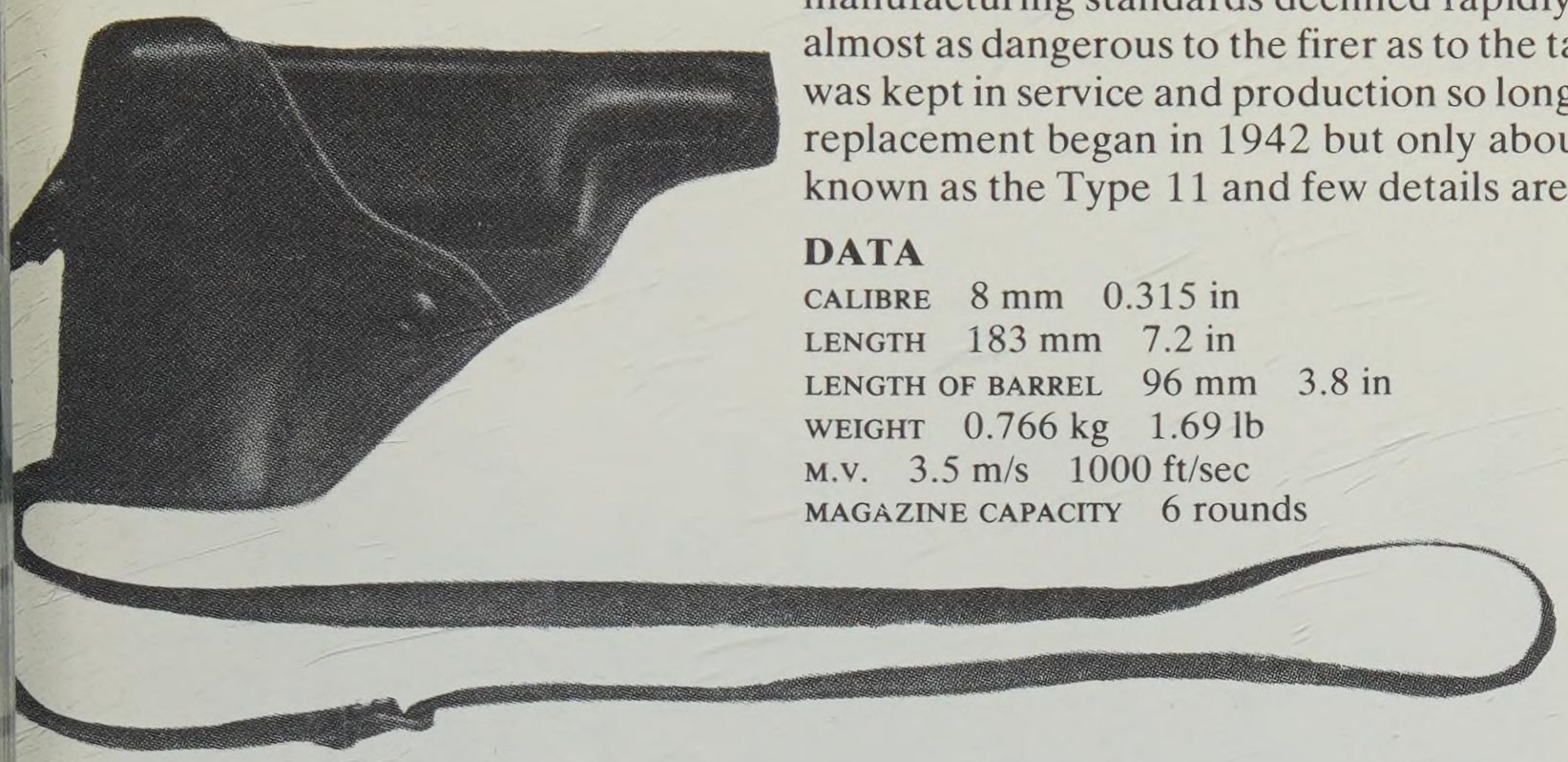
Japanese Military Police with Type 14 Pisto

8 mm Pistol Type 94

According to learned opinion, the Type 94 pistol was one of the worst automatic pistol designs ever made. It was first produced in 1934 and was offered commercially but there were few takers and the Type 94 was produced in State arsenals for issue to the Japanese Army officer corps. In service it did not take long for the many bad points of the design to manifest themselves. The weapon was awkward to 'point', and the sear was exposed on the left side of the receiver. When the gun was loaded this sear protruded and an accidental knock could fire the weapon. The locking mechanism was also suspect in that a round could be fired without the receiver being locked, especially when worn parts had not been properly maintained. After 1942, manufacturing standards declined rapidly so that late production specimens became almost as dangerous to the firer as to the target, and exactly why this very poor design was kept in service and production so long is difficult to determine. Design work on a replacement began in 1942 but only about 500 had been made by 1945. They were known as the Type 11 and few details are known of them.

DATA

CALIBRE 8 mm 0.315 in
LENGTH 183 mm 7.2 in
LENGTH OF BARREL 96 mm 3.8 in
WEIGHT 0.766 kg 1.69 lb
M.V. 3.5 m/s 1000 ft/sec
MAGAZINE CAPACITY 6 rounds



Holster for Type 94 Pistol

8 mm Pistol Type 94

6.5 mm Rifle Type 38

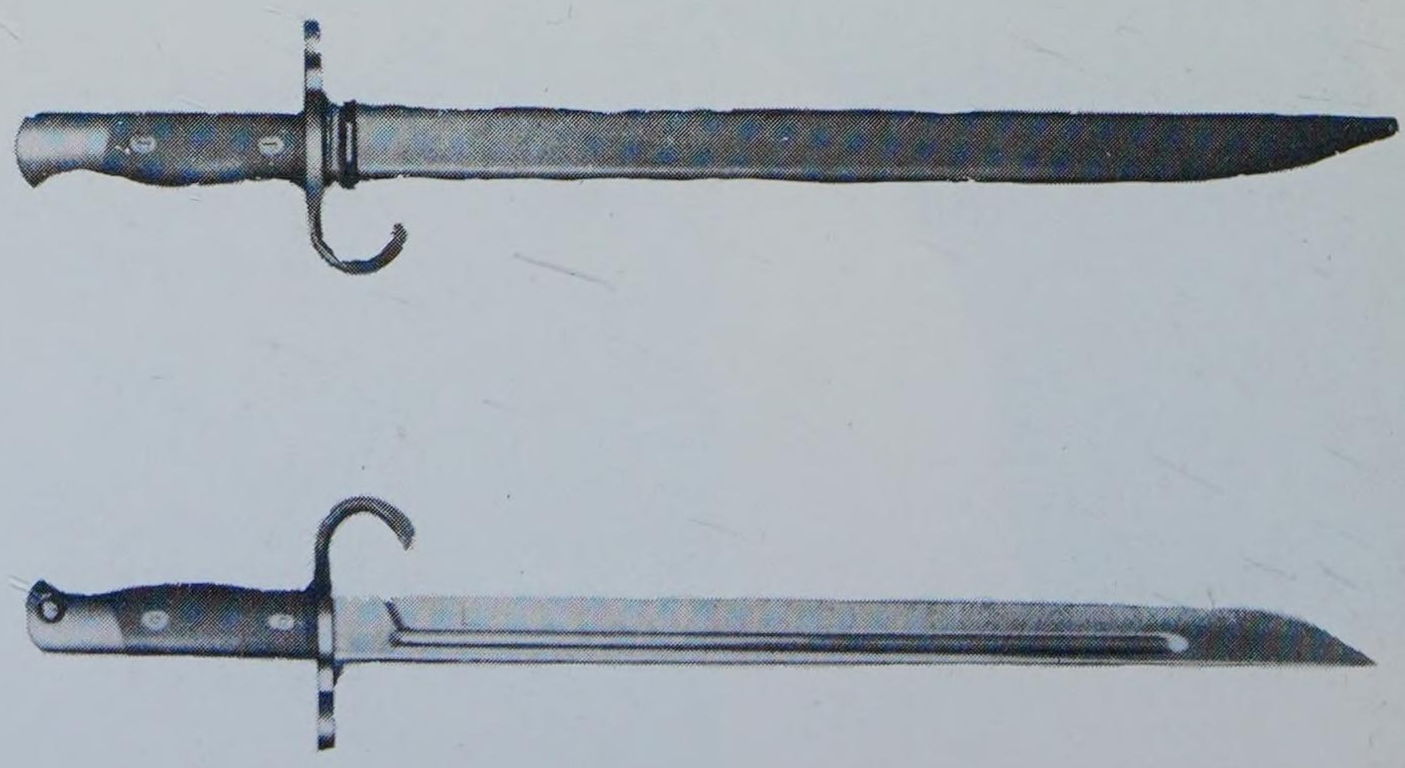
The Type 38 rifle was a development of the earlier Type 30 rifle designed by Colonel Arisaka, and was thus often referred to by the Japanese as the Arisaka Sampachi (or Sampachi Shiki Hoheiju). It was fundamentally a Mauser rifle based on the Gew 98 but with changes to the safety and cocking mechanisms. The combination of a light cartridge and the long barrel made the Type 38 rifle a very easy one to fire on account of the low recoil but the length was rather awkward to handle especially when the Type 30 bayonet was fitted. As well as becoming the standard Japanese service rifle, the Type 38 was also exported to some South East Asian states such as Thailand, and many were in use in China throughout World War 2.

DATA

CALIBRE 6.5 mm 0.256 in
LENGTH 1275 mm 50.2 in
LENGTH OF BARREL 797.5 mm 31.4 in
WEIGHT 4.2 kg 9.25 lb
M.V. 731 m/s 2400 ft/sec
MAGAZINE CAPACITY 5 rounds

6.5 mm Rifle, Type 38

Japanese soldiers with Type 38 rifles



Type 30 Bayon

6.5 mm Carbine Type 38

The Type 38 carbine was bought into service at the same time as the Type 38 rifle (1905). It differed from the Type 38 rifle only in the length of the barrel, and was intended for use by mounted troops but, by 1941, many were in use by second-line and garrison units, and many were used by the Chinese armies. Japanese designation was Sampachi Shiki Kiju, or Sampachi Kiju. Small numbers were made for paratroop use with a hinged butt folding to the right.

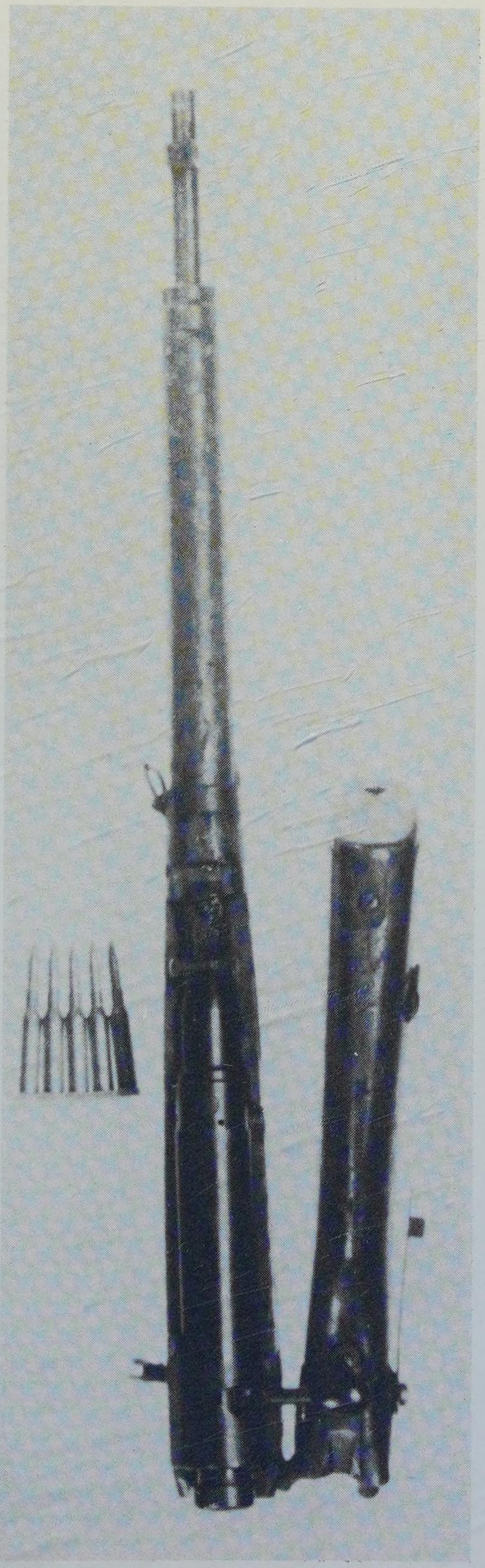
DATA

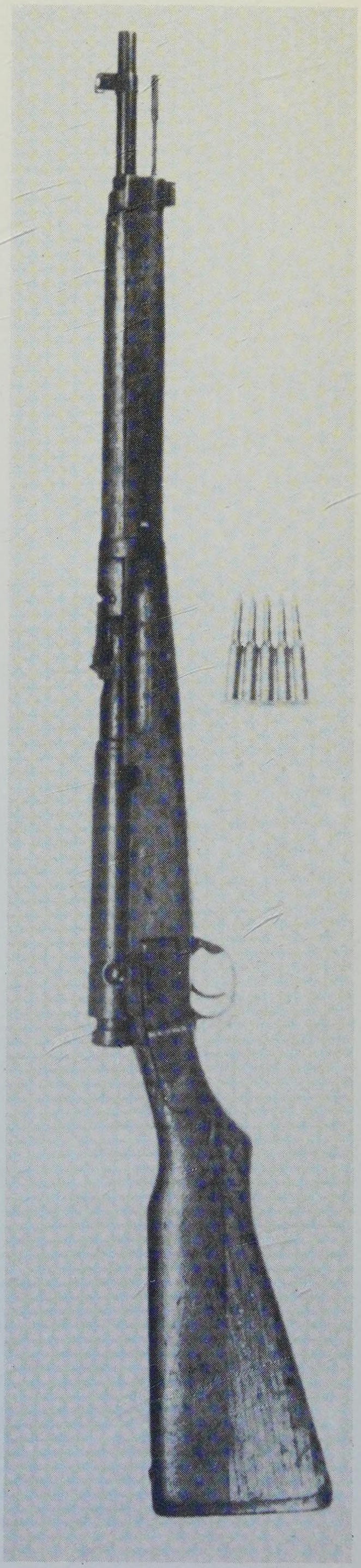
CALIBRE 6.5 mm 0.256 in
LENGTH 869 mm 34.2 in
LENGTH OF BARREL 505.5 mm 19.9 in
WEIGHT 3.3 kg 7.3 lb
M.V. 701 m/s 2300 ft/sec
MAGAZINE CAPACITY 5 rounds

6.5 mm Carbine Type 38

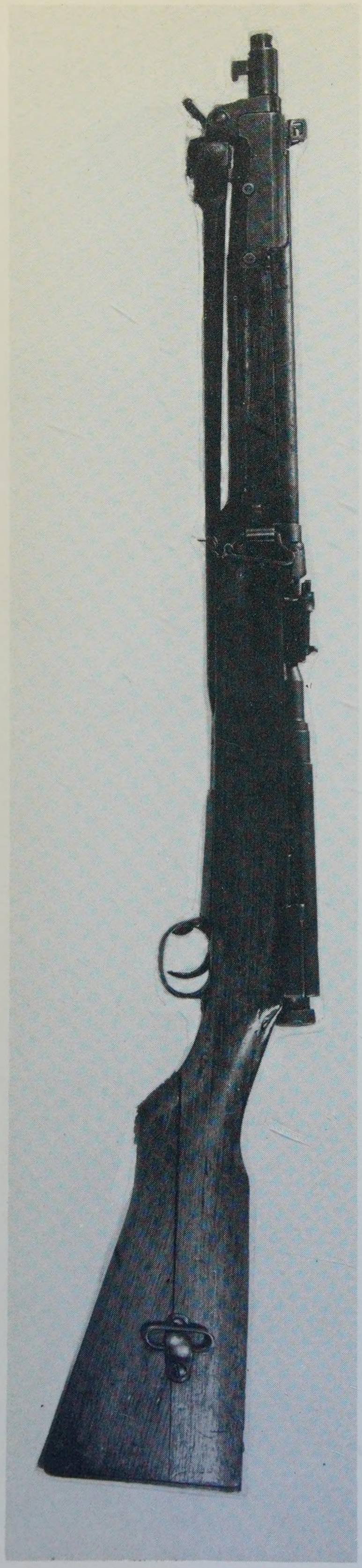
Far right: Type 38 Carbine for Paratroops

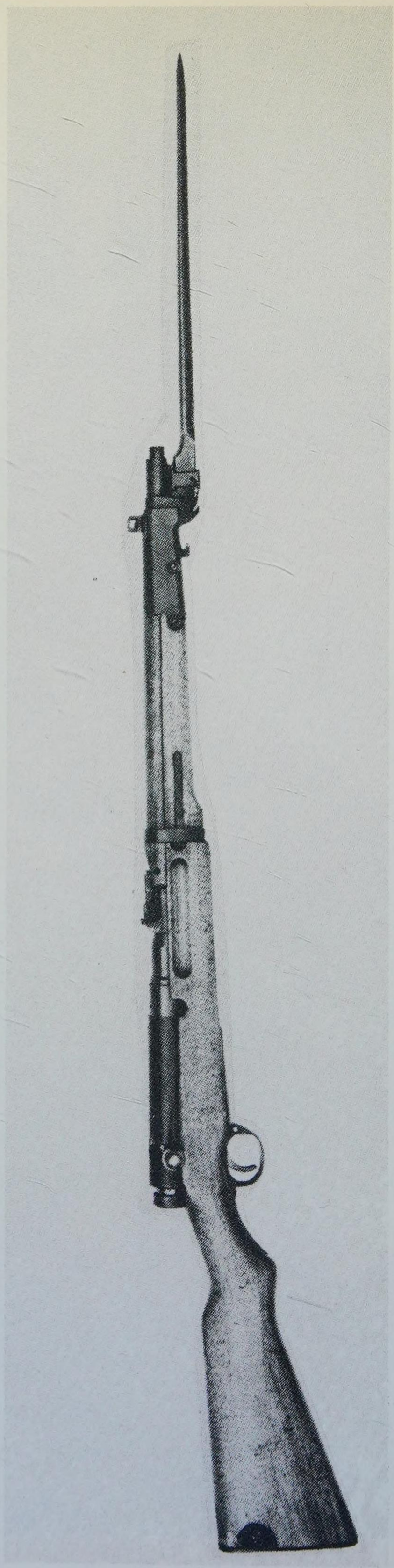
Right: Paratroop Carbine folded

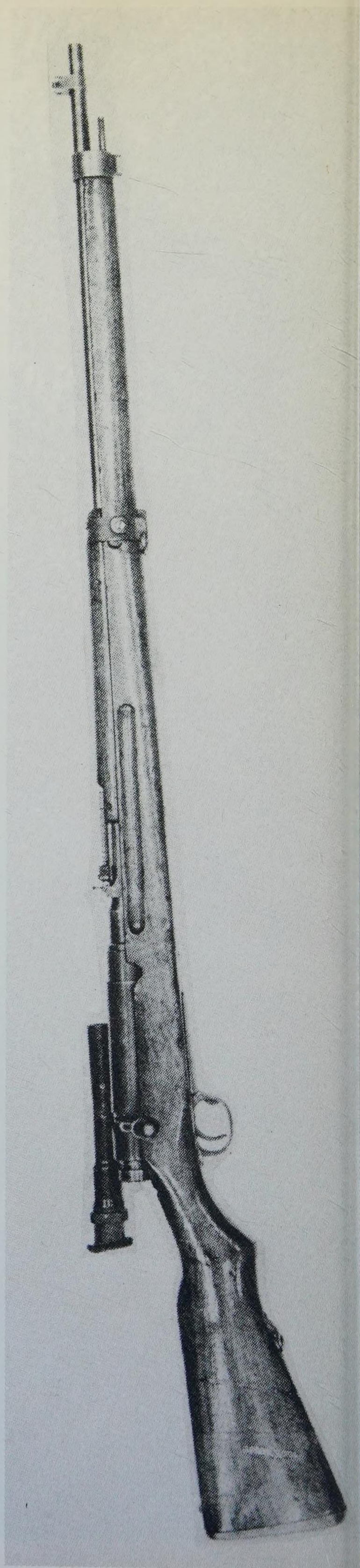




Japanese troops armed with Type 38 Carbines







. *6.5 mm Carbine Type 44*

. *Carbine Type 44 with ayonet extended*

. *6.5 mm Snipers' Rifle Type 97*

6.5 mm Carbine Type 44

Introduced in 1911, the Type 44 carbine differed from the Type 38 in having a folding bayonet permanently attached to the underside of the barrel. In all other respects the two carbines were similar. Intended for use by cavalry, the Type 44 was commonly known as the 'Kiju', or Yonyon Shiki Kiju.

DATA

CALIBRE 6.5 mm 0.256 in
LENGTH 978 mm 38.5 in
LENGTH OF BARREL 488 mm 19.2 in
WEIGHT 4.04 kg 8.9 lb
M.V. (approx) 701 m/s 2300 ft/sec
MAGAZINE CAPACITY 5 rounds

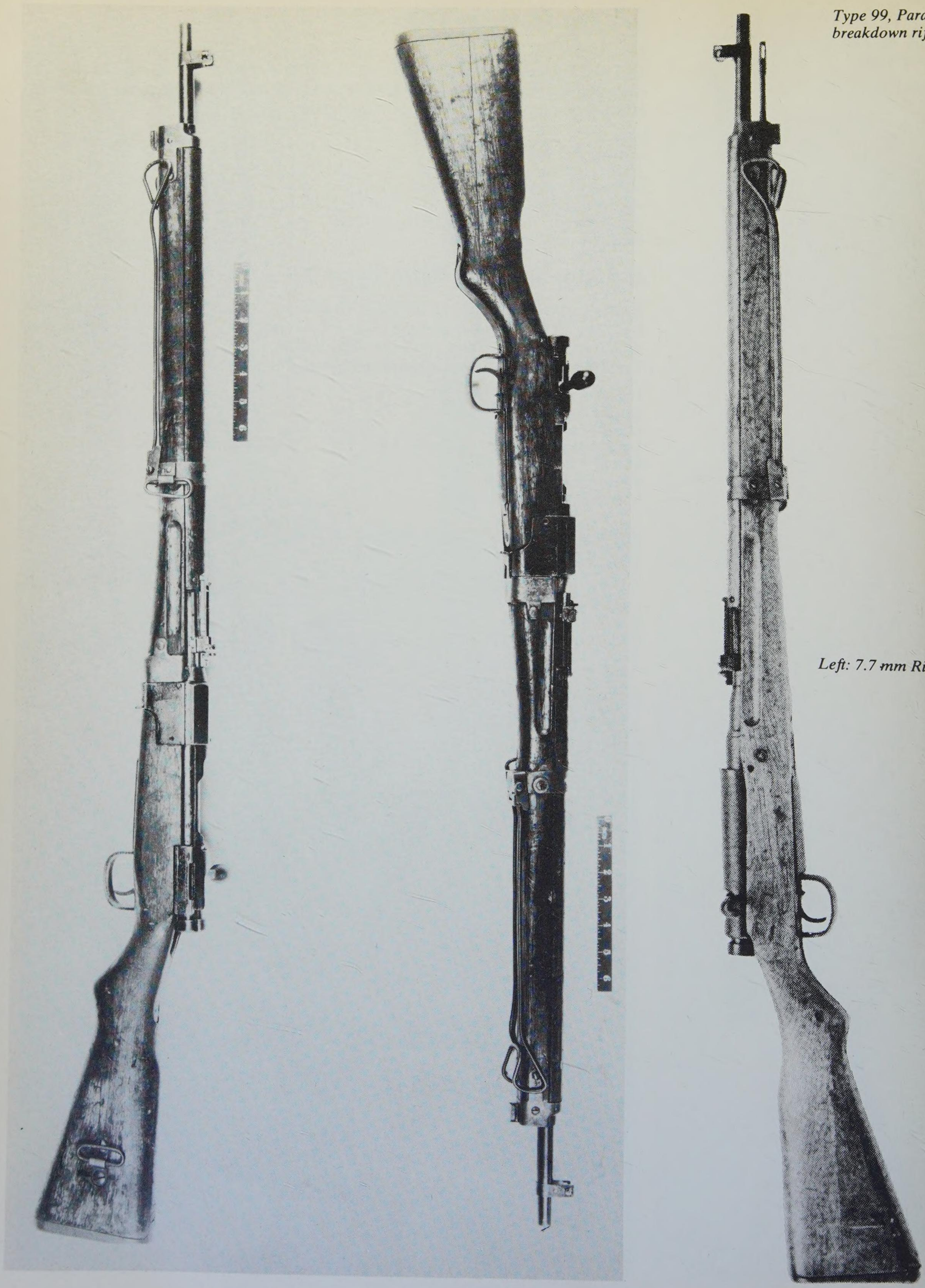
6.5 mm Snipers' Rifle Type 97

In 1937 a snipers' version of the Type 38 rifle was issued as the Type 97. It differed from the Type 38 in being fitted with a 2.5× telescopic sight and a folding wire monopod swivelling from the front sling swivel. Changes were made to the bolt handle to allow it to be opened without hitting the telescopic sight.

DATA

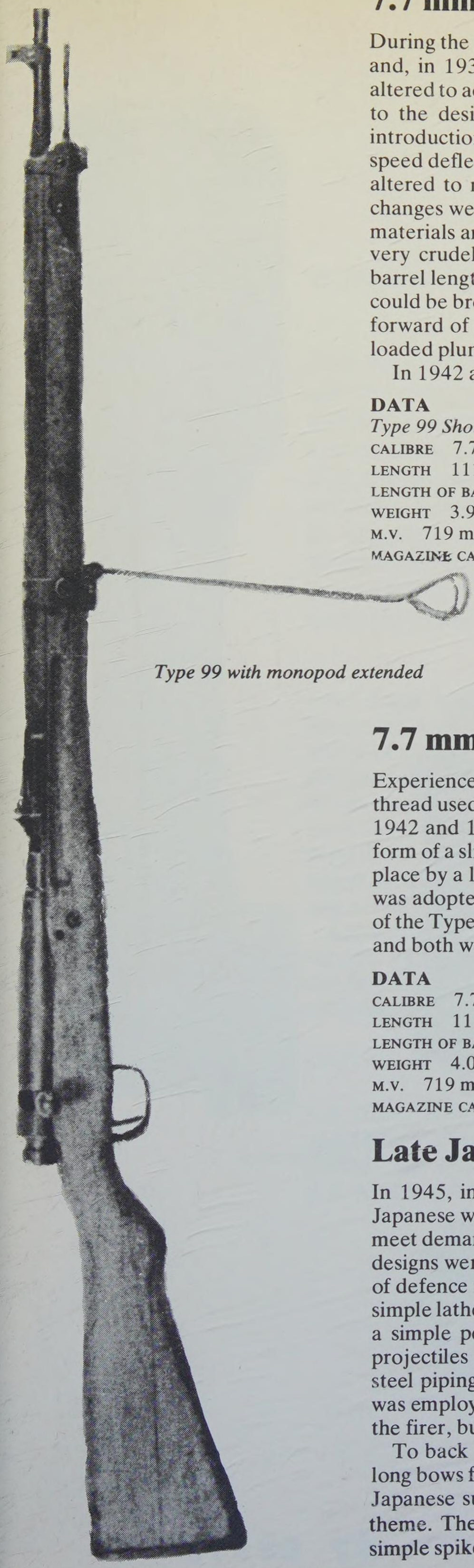
CALIBRE 6.5 mm 0.256 in
LENGTH 1275 mm 50.2 in
LENGTH OF BARREL 797.5 mm 31.4 in
WEIGHT 5.085 kg 11.2 lb
M.V. 731 m/s 2400 ft/sec
MAGAZINE CAPACITY 5 rounds

Japanese soldier armed with Carbine Type 44



Type 99, Paratroo
breakdown rifle.

Left: 7.7 mm Rifle,



Type 99 with monopod extended

7.7 mm Rifle Type 99

During the 1930s, the Japanese forces gradually adopted a heavier 7.7 mm cartridge and, in 1939, a rimless 7.7 mm round was introduced and the Type 38 rifle was altered to accommodate this new calibre. At the same time, some changes were made to the design to bring it into line with current theories, one of which was the introduction of an 'anti-aircraft' rear sight with side folding leaves marked off for speed deflections. A folding wire monopod was added, and many components were altered to make the rifle easier to produce. As the war continued more of these changes were made, the rear sight was altered back to a conventional form, and the materials and standards of manufacture declined until late production versions were very crudely and roughly made. There were two versions which differed only in barrel length, and a further version was produced for parachute troops. This version could be broken into two halves by the use of an interrupted thread in the barrel just forward of the receiver. In position, the two halves were held in place by a spring-loaded plunger. To further reduce bulk, the bolt handle could be removed.

In 1942 a version with a 4 × telescopic sight was introduced into use.

DATA

Type 99 Short rifle
CALIBRE 7.7 mm 0.303 in
LENGTH 1115 mm 43.9 in
LENGTH OF BARREL 655 mm 25.8 in
WEIGHT 3.9 kg 5.4 lb
M.V. 719 m/s 2360 ft/sec
MAGAZINE CAPACITY 5 rounds

Type 99 Long Rifle
LENGTH 1273 mm 50.1 in
LENGTH OF BARREL 797 mm 31.4 in
WEIGHT 4.13 kg 9.1 lb
M.V. 728 m/s 2390 ft/sec

7.7 mm Parachutists' Rifle Type 2

Experience in action with the Type 99 parachutists' rifle showed that the interrupted thread used to break down and the weapon tended to work loose when fired. During 1942 and 1943 a new 'take-down' rifle was introduced where the break was in the form of a sliding horizontal wedge mating with a cut-out. The two halves were held in place by a locking key. On this model the wire monopod was not fitted. The Type 2 was adopted as the standard parachutists' rifle but very few were made. Production of the Type 99 and Type 2 parachutists' rifles was carried out at the Magoya Arsenal and both were known as the 'Teraju'.

DATA
CALIBRE 7.7 mm 0.303 in
LENGTH 1115 mm 43.9 in
LENGTH OF BARREL 655 mm 25.8 in
WEIGHT 4.04 kg 8.9 lb
M.V. 719 m/s 2360 ft/sec
MAGAZINE CAPACITY 5 rounds

Late Japanese Weapons (1945)

In 1945, invasion of the Japanese mainland seemed imminent and, by that time, Japanese war production was reduced to such straits that it was completely unable to meet demands to arm the services and civilian militia. As a result, several very simple designs were produced that enabled some form of weapon to be placed in the hands of defence forces. One was a single-shot bolt action rifle that could be produced on simple lathes, and the round used was the 8 mm pistol cartridge. Another design was a simple percussion gun loaded with black powder. Calibre was 13 mm and the projectiles were cut from steel stock in 15 mm lengths. The barrels were ordinary steel piping smooth-bored, and a percussion hammer and nipple firing mechanism was employed. Firing one of these weapons must have been extremely dangerous to the firer, but perhaps this fitted in with current 'kamikaze' doctrines.

To back up these simple weapons, the Japanese intended to use cross-bows and long bows fitted with explosive arrows, and stocks of these were discovered after the Japanese surrender, along with the usual 'last ditch' variations on the simple pike theme. These were usually lengths of pipe or bamboo fitted with a bayonet or a simple spike.

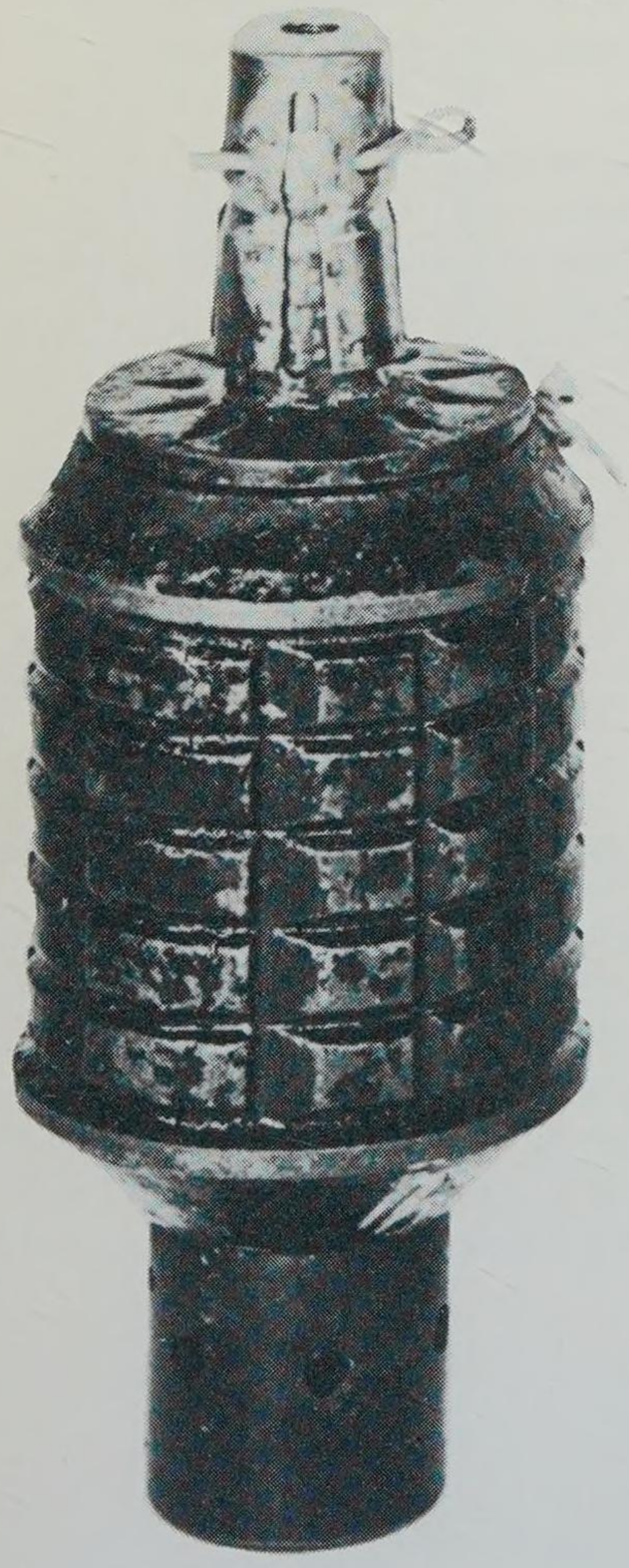
Japanese Hand Grenades

Type 91
LENGTH OVERALL 95 mm 3.75 in
DIAMETER 50 mm 1.97 in
WEIGHT 0.533 kg 1.175 lb
DELAY 7.8 seconds

Type 97
LENGTH OVERALL 95 mm 3.75 in
DIAMETER 50 mm 1.97 in
WEIGHT 0.454 kg 1.0 lb
DELAY 4.5 seconds

Type 99
LENGTH OVERALL 89 mm 3.5 in
DIAMETER 41 mm 1.625 in
WEIGHT 0.51 kg 1.125 lb
DELAY 4.5 seconds

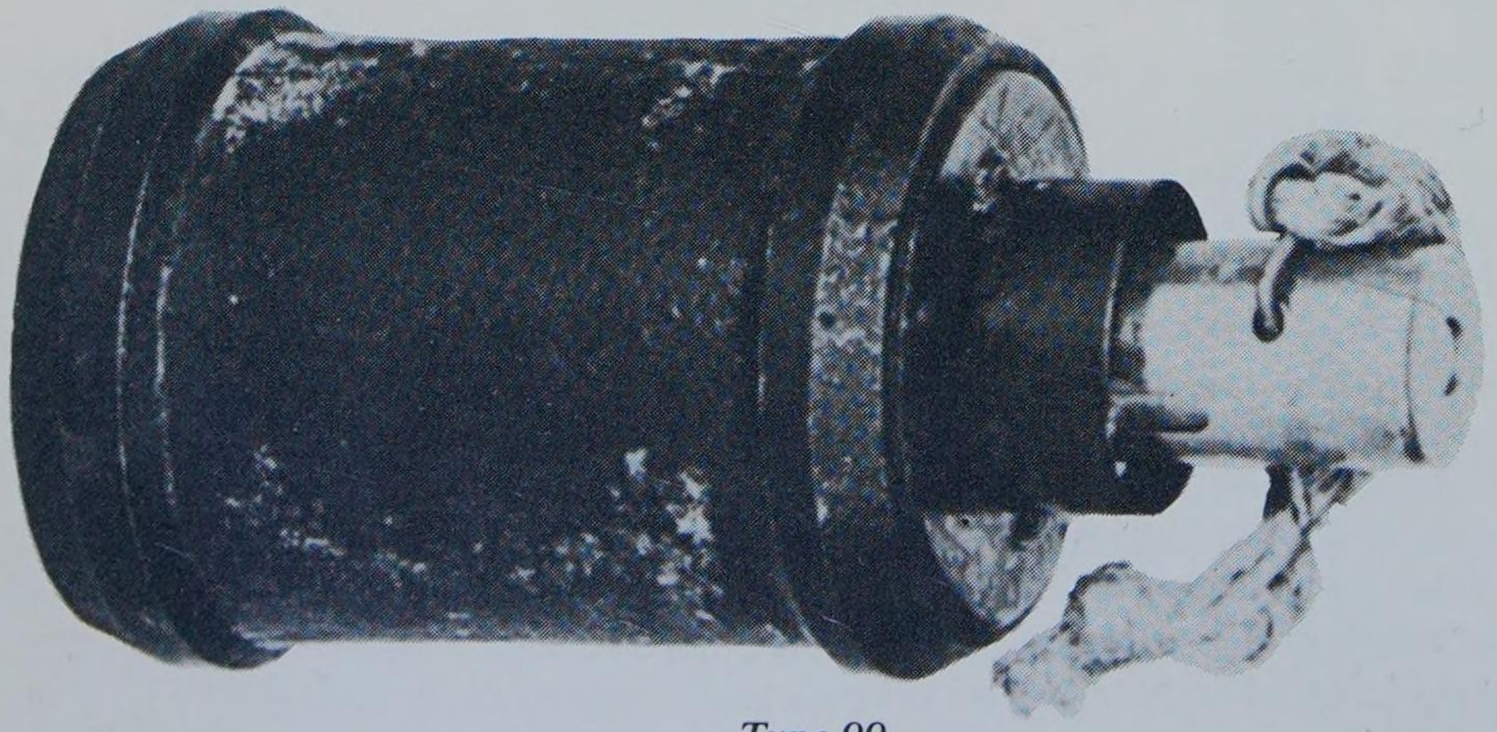
H.E. Stick Grenade
LENGTH OVERALL 200 mm 7.87 in
DIAMETER 51 mm 2.0 in
WEIGHT 0.553 kg 1.219 lb
DELAY 4.5 seconds



Type 91

Type 97

Stick Grenade



Type 99

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